RELATIONSHIP OF THE ĀLAYA-VIJÑĀNA TO THEORIES OF THE UNCONSCIOUS IN DEPTH PSYCHOLOGY

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Abstract

The ālaya-vijñāna has been the subject of much scholarly research and has frequently been described as a type of subliminal or unconscious level of mental processing. Although several attempts have been made to make a systematic comparison between the alaya-vijñāna of Yogācāra Vijñaptimātratā and the psychological unconscious in Depth psychology, there is a tradition of errors exemplified by articles exclusively from the psychoanalytic perspective that ignore the cognitive unconscious. While these comparisons reveal Freud's claim that there are unconscious mental processes is supported by recent work, there is, however, no need to identify concepts of the unconscious with psychoanalysis and part of the purpose of this paper is to separate the unconscious from its Freudian connection. This is not done in the spirit of dismissing or discrediting psychoanalytic theory, it is done in the interest of conceptual clarity.

In chapter one I outline the psychoanalytic theory of the unconscious in Depth Psychology. In chapter two I discuss the cognitive unconscious and present empirical evidence from research studies done on unconscious mental processing which supports the claim that there are unconscious mental processes and that these unconscious mental processes are in no way related to Freudian theory of the unconscious. Chapter three compares the psychoanalytic unconscious with the cognitive unconscious on the basis of repression, recoverability of unconscious contents,

inaccessibility, and the effect of unconscious influences. Chapter four and five briefly discusses the development of Yogācāra Vijñaptimātratā, its founders, main texts, and key concepts. Chapter six compares ālaya-vijñāna with theories of the unconscious in the area of repression, recoverability of unconscious contents, inaccessibility and the effect of unconscious influences. Finally, chapter seven discusses the psychological transformation in ālaya-vijñāna theory.

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Introduction

Scientific psychology began as the study of consciousness. Wundt,[1] Titchener,[2] and James[3] who founded the earliest psychological laboratories generally assumed that the mind[4] was able to observe its own inner workings. For this reason they relied on the method of introspection,[5] by which trained observers attempted to analyze their perceptions, memories and thoughts, and reduce them to elementary sensations, images, and feelings. But observations in both the laboratory and clinic suggested that mental activity was not limited to conscious experience. For example, Helmholtz[6] concluded that conscious perception was the product of unconscious inferences, i.e., rather than simply reading off percepts from the world of external stimulation, we unconsciously draw on our past knowledge in order to effect accurate interpretations of what we perceive. The experience of one's past perception is unconsciously added to one's present reaction to stimulus. All this changed with Sigmund Freud[7] whose theoretical contribution did not for one moment assume we could escape the impact of the unconscious in our mental lives. For Freud, some thoughts, feelings, and fantasies were not only unattended, they were selectively avoided---a process he called repression. Freudian theories of the unconscious emphasized the existence and influence of personal <u>internal</u> events that were not attended or noticed. Cognitive theories of the unconscious, as presented in cognitive psychology, have examined the impact of <u>external</u> events that are

not attended or noticed. Although what is emphasized is different, both traditions assert that conscious experience is subject to unconscious influences.[8]

The Yogacarins too had a special interest in the study consciousness. They sought to understand the relationship between mental processes and their religious implications. An understanding of the nature of mental activity, conscious and unconscious, is central to Yogacara soteriology. The goal of spiritual practice was to weaken and finally eliminate the usual patterns of experiencing the world filtered through the five senses and the idea-creating intellect. The structures of consciousness were the paramount object of study for the early Yogacarin philosophers. Mind capable of knowing its own processes, of understanding the nature of mental constructions through the language developed in a given culture and through the interdependency between mind and its objects became the subject of vigorous study and controversy.

In the course of their analysis of consciousness the Yogacarins developed a theoretical interpretation of mental processing which included an "underlying consciousness" similar to the "unconscious" in the psychological sense. This "underlying consciousness" called the alaya-vijnana, is considered to be the latent substructure of all mental activity.

Although there has been a growing interest in the comparative study of the alaya-vijnana of Vijnaptimatrata Yogacara (Yamada 1955; Osaki 1986; Cernovsky 1988; Waldron 1988)

and the unconscious in Depth psychology, most of these articles are written only from a psychoanalytic perspective because Freud's theorizing about the unconscious has been accepted as the only interpretation of unconscious mental processing in Buddhist studies. Because both Yogacara Vijnaptimatrata[9] theory and psychology offer insights into the workings of unconscious mental structures and processes, this paper will compare the alaya-vijnana with theories of the unconscious in Depth psychology and cognitive psychology in the areas of repression, recoverability of unconscious contents and processes, inaccessibility, and the effect of unconscious influences.

1. Theories of the Unconscious in Depth Psychology

In this chapter I will examine the psychoanalytic theory of the unconscious in Depth Psychology focusing on repression, recoverability of unconscious contents, inaccessibility, and the effect of unconscious influences.

"Depth Psychology"[10] is a term used to describe any psychology that postulates dynamic psychic mental activities that are "unconscious" and attempts to understand and to work with the unconscious mind. This definition applies to the psychological movement from Mesmer to Freud and onward, includes psychoanalysis, Jungian analysis, and hypnosis. Eugen Bleuler (1857-1939) was credited with having coined the term 'Tiefenspychologie' (Depth psychology) which was popular at the time when psychoanalysis was equated with the psychology of the unconscious.

In the middle of the nineteenth century artists and philosophers had developed a concept of the unconscious mind which played an important part in shaping Freud's ideas on the subject, and historians of psychology have recognized the debt which psychoanalysis owes to European Romanticism.[11] By the 1900's Europeans had come to ascribe the following four separate functions to the unconscious: (1) the function of recording memories and registering perceptions which often escape conscious attention; (2) the dissolutive function, as evidenced by hypnotic behaviours and the multiple or split personalities of schizophrenic patients; (3) the creative function of innovative

or inspirational thinking; and (4) the mythopoetic function of fabricating inner romances, fantasies, or dreams which give psychic life a kind of autonomous reality apart from events that transpire in the physical universe.[12] But Freud's ambitions were scientific rather than literary, and his concept of mind was also influenced by a commitment to scientific materialism. As far as he was concerned mental events were dictated by physical processes, and he believed that psychological function was rigidly determined by natural laws. Freud saw human beings as descendants from primitive ancestors, and that they had inherited instinctive impulses which had to be restrained in order to meet the demands of civilized coexistence. It was in this context that Freud began to visualize the unconscious as a custodial institution, a mental storehouse in which disruptive instincts could be confined and silenced.

1.1. Psychoanalytic Theories of the Unconscious

Freud's initial discovery of a level of mentation, which is not accessible to immediate awareness, but which has observable effects on behaviour and on experience, rests on this dynamic concept; it antedates, his first use of the word, "psycho-analysis" in 1896. His innovation is a good example of what Thomas Kuhn has described as the development of a new paradigm.[13] It stood in contrast to the view of his first collaborator, Joseph Breuer, who theorized that there was a simple absence of communication between what he called a "hypnoid" mental state and

waking consciousness. He assumed that in such a hypnoid mental state, a real trauma had occurred and had been "forgotten."

Freud tried to allow a more physiological theory to exist side by side with his new model until "observation showed me always and only one thing."[14] he became convinced that the "splitting off" of mental contents was deeply motivated in his cases of hysteria and was not simply an absence of communication between mental states. He concluded that the inaccessibility of some mental contents resulted from the development of some ill-defined "energies" designed to keep them out of awareness.

Freud formulated two major theories of the unconscious. The first was presented in The Interpretation of Dreams (1900), and the second in the Ego and the Id (1923). An earlier formulation of the unconscious, predating that of The Interpretation of Dreams, can be traced through A Project for a Scientific Psychology (1895) and The Origins of Psychoanalysis (1887-1902).[15]

In his first formulation of the unconscious, Freud attempted to explain cognition without awareness by his reference to a layer of mental contents close to consciousness. The latent unconscious, according to Freud, incorporated those mental contents which could temporarily disappear from consciousness but were essentially accessible. Freud supported this assumption with clinical observations such as the unexpected emergence of solutions to mathematical problems during sleep, the posthypnotic performance of suggested acts, and similar incidents. By

distinguishing latent contents (accessible to consciousness) from repressed contents (inaccessible to consciousness), it was possible for Freud to make a parallel assumption of layering the psyche into the repressed-unconscious, the latent-unconscious (preconscious), and consciousness. This division was underlined by the fact that in each instance a censor existed which separated the different areas.[16] Freud conceived the term unconscious as covering an entire system.[17]

In Freud's second formulation of the unconscious he discontinued equating the repressed and the unconscious[18] and in The Ego and the Id, Freud took into consideration the totality of the individual, breaking away from his personalistic approach. He then split the conscious, unconscious, and preconscious into a second tripartite division of the Ego, Id, and Superego. Now, the interplay between these three --- Ego, Id, and Superego --- drew his major interest. In the id, Freud recognized an area which was more encompassing than the unconscious and contained drives which did not need to be repressed. Everything which he had formerly assumed to be characteristic of the unconscious was equally valid for the id. The id opened a vista of the impersonal phylogenetic background of the psyche. It represented the "dark, inacessible part of our personality."[19] Because of this inherent inaccessibility, Freud saw the id as an area which was open to somatic influences.

His impulse to substitute the term "id" where "unconscious" had formerly been used came from the discovery that the superego

contained an unconscious part of the ego which had not been repressed. The superego, although not repressed, was the cause of all repression activity. Equating the unconscious and the repressed was no longer possible. The superego, that unconscious part of the ego, was important to Freud because essential functions of the individual --- such as questions of conscience or morality --- originated in the unconscious or operated out of the unconscious. With the conception of the superego Freud took a decisive step from considering the libidinous object to an appraisal of the subject. Freud saw the superego mainly as an aggressive and self-destructive power which in its role of introjecting parental authority included all the aggression accumulated since the days of the first progenitor.

Together with the discovery of the unconscious part of the ego went a clearer understanding of the (pre)conscious part, the 'reality-ego'. Freud conceded to the ego the tasks of the reality principle, of control and repression. This hypothesis was further confirmed by the discovery of the roots of the ego in the deep layers of the id. Freud determined that the (pre)conscious ego "is that part of the id which has been modified by the direct influence of the external world"[20] and has become the organizing centre. After Freud had allotted the moral function to the superego and separated it from the total ego, the ego in the narrower sense retained the vital functions of reality testing and of protecting the individual from internal as well as external dangers. Since the ego was also assigned the agencies of

thinking, reasoning, and prudence,[21] this made it a "slave to three masters," protecting the individual "from the external world, from the libido of the id, and from the severity of the superego."[22] Thus, the ego was confined and oppressed to such a degree that it also became "the actual seat of anxiety."[23] In psychotherapy, therefore, Freud assigned major importance to the ego, mainly in the adjustment to reality and control of the drives. He expressed this view in the sentence "Where id was, there ego shall be."[24]

In these two formulations of the unconscious, mental processes are divided structurally in terms of whether they are involved with instinctual gratification (id), reality monitoring (ego), morality (superego),or, mental processes available to consciousness, ranging from complete unavailability (unconscious), potential availability (preconscious), and complete availability (conscious).

Despite the major role played by the unconscious in psychoanalysis what Freud actually meant by the term was very confusing. For example, he used the term 'unconscious' (das Unbewusste) in at three acknowledged senses --- the "descriptive," "dynamic," and "systematic".[25] Based on his work in mythology and religion, Carl Jung further confused the issue by using the "personal" and "collective" unconscious. Therefore, in the next section I will review of each of these senses in order to illustrate the many definitions used for the term unconscious.

1.1.1. Descriptive Unconscious

Freud signified all mental contents and processes that are not at any given moment in consciousness as the descriptive unconscious. The descriptive unconscious divides mental contents and processes into two subsets, those that are in awareness at any given time (the conscious) and those that are not (the unconscious). The unconscious in this sense has been supported by research done in cognitive psychology.

1.1.2. Dynamic Unconscious

The dynamic unconscious, also termed, "the unconscious proper" or simply "the unconscious," results from a distinction Freud makes between "two kinds of unconscious." One was defined in more dispositional terms as mental contents that are capable of becoming conscious; that is unconscious mental contents that can become a part of consciousness and the other with which this is difficult or impossible. He called the unconscious which is only latent, and becomes easily conscious, the 'preconscious'[26] and retained the term 'unconscious' for the "other".[27] This represents a further division of the descriptive unconscious into two complementary subsets, the preconscious and the unconscious proper (or dynamic unconscious). The unconscious proper (or dynamic unconscious) becomes the "inaccessible,"[28] which corresponds to the cognitive psychological usage,[29] the preconscious corresponding to "accessible" mental contents.

The dynamic unconscious is defined by Freud not only as inaccessible but also as that which is repressed from

consciousness.[30] This twofold definition of the unconscious proper as the inaccessible, and the repressed---would not be problematic if the two definitions amounted to the same thing or if one necessarily implied the other. Given that repression produces inaccessibility, does the converse follow that all inaccessible mental contents are inaccessible by virtue of being repressed? And if not, how should one designate such inaccessible mental contents? They are not "preconscious," but if they are not unconscious in the sense of being repressed then in what sense are they unconscious? The question of the unconscious (the inaccessible) should not be entangled with any theory about why things are unconscious (such as repression). It is possible to believe in the existence of the unconscious, even of an active, intrusive, and, therefore, "dynamic" unconscious, without necessarily supporting the proposition that repression accounts for all or even some of the unconscious. Freud only developed one theory of the unconscious.

1.1.3. Systematic Unconscious

Freud's third sense of the unconscious, the systematic sense (later redesignated as the id), refers not to a gradation of consciousness---though it is unconscious but to a hypothesized system (structure, organization) of the mind that, in contrast to a conscious-preconscious system later designated the ego, is exclusively hedonistic ("it obeys the pleasure principle") and primitive cognitively (it operates according it "primary process functioning"). It is in this sense that "the laws of unconscious

activity differ...from the conscious."[31] But since the systematic unconscious was abolished by Freud in The Ego and the Id and incorporated into his "structural model of mind"[32] as the id, the formula must be revised to indicate that the laws of the id differ from those of the ego (the pleasure principle and primary process functioning versus the reality principle and secondary process functioning). This point is underscored because both advocates and critics of the unconscious, frequently make the mistake of assuming that for the "psychoanalytic" unconscious to be demonstrated, it must be shown that unconscious processes follow different rules than conscious ones.

The unconscious was replaced by Freud in 1923, becoming the id. The descriptive unconscious, that is, the accessible but not accessed, requiring no empirical proof, and is in many cases distinguished from the unconscious proper by Freud's redesignation of it as the preconscious. What remained then was the unconscious proper (or "dynamic unconscious") which is the inaccessible. Inaccessibility may or may not be due to repression, though it should be emphasized that the inaccessible may be dynamic in the sense of being active or influential in shaping ongoing behaviour.

1.1.4. Personal Unconscious

In contrast to Freud, Jung's[33] work on the unconscious focused on the totality of conscious and unconscious processes. He used the terms "unity" and "totality" or "wholeness" for the first time in 1913,[34] and he understood his "total reaction"[35] as

a developmental process which comprised all aspects of the individual. From then on, he was consistently occupied with the idea of a "total personality." Because this totality included conscious as well as unconscious contents, everything depended upon establishing a productive relationship between the ego and the unconscious. The mediation of the opposites of conscious and unconscious was the prerequisite for "individuation," that "process of differentiation having for its goal the development of the individual personality."[36] This always included the complementation of the ego-personality by the counterfunction, "the greater personality"---a process which Jung exalted in the concept of self-realization.[37]

Conscious and unconscious were not necessarily in <u>conflicting opposition</u>, which was predominantly Freud's view. Jung's psychology placed more emphasis on an attitude open toward the interplay between consciousness and the unconscious.

Jung's theory of the unconscious included: (1) conscious or ego; (2) the personal unconscious; and (3) the collective unconscious.

(1) Conscious or Ego

Like Freud, Jung attributed the power of self-preservation to the ego, protecting the individual, but, unlike Freud he did not see it as the seat of anxiety. Jung's concept of the ego differed from Freud's due to its unique connection with consciousness. Jung recognized in the ego the point of reference of all conscious actions. In this context he saw a further

confirmation of the structure of the ego as a complex; consequently, the ego was not only the centre of the field of consciousness, but also "the subject of all conscious actions of the individual."[38]

In contrast to Freud, who recognized in the superego an unconscious part of the ego, Jung always maintained that "consciousness...seems to be the necessary precondition for the ego";[39] however, "without the ego, consciousness is unthinkable"[40] is not equally valid. Only through consciousness did the ego possess that quality which always stimulated the comparison with the luminous body of the sun. With this faculty the ego became the opposite of the unconscious, the agency which was able to decide conflicts and assume decisions and responsibilities.

Even though an individual's personality was reflected in the ego, the quality of consciousness was not equivalent to that of the personality as a whole. Jung's ideas of the ego as a "centre which is conscious of something" neither coincided with Freud's (pre)conscious ego nor with his superego. What Freud attributed to the superego appeared to Jung much more like the image of a representative of the collective consciousness, of the "conventional morality, the creation of curmudgeonly praeceptores mundi."[41] As opposed to Freud's assumption of a basically unconscious origin of the superego (by introjection of moral rules and paternal authority), Jung saw in the superego a conscious acquisition which reflected the moral rules inherent in

conventional society. What Jung missed in the concept of the superego was the presence of an intellectual authority to challenge the individual.

Jung's all-inclusive point of view was also evident in his concept of the ego. He saw the ego as the result of a developmental process in which the individual gradually grew from a state of complete dependence on the background of the psyche to constancy and continuity. For him, this process was the expression of something greater in the individual which tended to concentrate the initially uncentered realm of the psyche into a virtual focusing-point.

(2) Personal Unconscious

How does Jung's concept of the personal unconscious compare with Freud's idea of the unconscious? Freud distinguished between the purely descriptive concept of the latent unconscious, which is separated from consciousness only by an insignificant censor, and the so-called dynamic unconscious, that is, the repressed contents. The latent unconscious largely coincided with the "fringe of consciousness," which is close to consciousness. The repressed in Freud's and in Jung's psychology conformed only in part, since as far as Freud was concerned, the unconscious constituted an essentially different agency from the (pre)conscious. It obeyed other laws (free floating energy, mobility of cathexis, mechanisms of dissociation between affect and idea) as well as different motives (pleasure principle).

The role of consciousness remained shadow-like to Freud. He maintained the position of reducing consciousness to a mere process of observation---both of internal and external events. In addition, he conceived this "superficial part of the psychic apparatus"---as a "highly fugitive state," which does "not leave behind any permanent change...but expire(s), as it were, in the phenomenon of becoming conscious."[42] He asserted that consciousness and memory were on the whole mutually exclusive"; there was a complementary relationship between consciousness and traces of excitation."[43] In the process of perception the memory trace was to have slipped into the preconscious and from there became accessible to ego and consciousness. This meant only the function of becoming conscious was dependent on the preconscious and reserved for the presconscious ego. Freud concluded from this that bringing to consciousness was the same as bringing to preconscious awareness.[44] In contrast, Jung could not see a basic difference between the two spheres of consciousness and the personal unconscious, that is, the repressed. Both spheres---consciousness as well as the personal unconscious---presented feelings, images, ideas, and thoughts. Jung considered the "invention of consciousness as the most precious fruit of the tree of knowledge,"[45]

Jung divides the concept of the unconscious in two parts, the personal unconscious and the collective unconscious.[46] In his explorations of the unconscious Jung was concerned with the role of consciousness, which he frequently refers to as the conscious.

He maintained that there is a relationship or a dissociation of the conscious and the unconscious. The unconscious may appear to be complementary to the conscious, filling out or completing what is found lacking there. In the case of dissociation the unconscious is exaggeratedly opposed to the contents of the conscious, but the functional relationship of the unconscious processes to consciousness is described as compensatory, since experience shows that we may bring to the surface the subliminal material that is constellated by the conscious situation, i.e., all those contents which would not be missing from the picture if everything were conscious. The compensatory function of the unconscious becomes more obvious the more one-sided the conscious attitude is; pathology furnishes numerous examples of this.[47]This compensatory function of the unconscious to the conscious is the cornerstone of Jung's psychology as a basis for psychotherapy. Unlike Freud's psychoanalysis, which seeks to retrieve repressions from the unconscious, Jung's approach to the unconscious makes possible the inclusion by the conscious of many images and emotions that have never previously been experienced consciously.

1.1.5. Collective Unconscious

As a result of Jung's studies on the psychology of religion and mythology, he was not satisfied with limiting unconscious motivation to infantile, sexual, or personal drives. He did not agree with reducing unconscious motives to wish and wishfulfillment. His work on primordial images and his

observation of their often overpowering numinosity and suprapersonal meaning led Jung to discover that individual consciousness was not without predetermining factors. These predetermining factors he found in the idea of the collective unconscious, whose contents are inherited and essentially universal. It is a "store house....of accumulated experiences,"[48] and its contents, the archetypes, "deposits of the constantly repeated experiences" of mankind.[49] Unlike Freud, to whom the unconscious consisted essentially of repressed infantile sexual wishes,[50] Jung saw in it also "a collective psychic disposition, creative in character."[51] The collective unconscious was an objective fact, always existent and forming the constantly vital background of psychic events. The term "collective unconscious" appeared for the first time in 1917 as a description of the universal and ubiquitous deep layer of the psyche.[52]

While the images of the personal unconscious represented reflections of personal experiences, the forms of the collective unconscious were of an impersonal nature.[53] Jung called the components of the collective unconscious archetypes. Jung described these archetypes as primordial images that are the most fundamental ingredients of the psyche. They are the forms that underlie everything that we perceive, imagine, and think.

2. Theories of the unconscious in Cognitive Psychology

A familiar theme in cognitive psychology has been that psychoanalytic conceptions of the unconscious lacked empirical

evidence. Cognitive psychologists have usually gone beyond empirical skepticism and suggested that even the concept of unconscious cognition has no place in psychology. This view, which partially explains the omission of the topic of the unconscious from the research literature, and even the omission of the word unconscious from the vocabularies of many psychologists --- was prevalent in the 1950s, when empirical research,[54] ultimately subsided without any convincing evidence for psychoanalytic-inspired conceptions of unconscious influences on perception.

Erdelyi (1974) initiated a second attempt[55] by making a strong case for theoretical connections between cognitive psychology and psychoanalytic conceptions of unconscious cognition. Although this research has remained active, it has not produced widely accepted evidence for psychoanalytic interpretations of unconscious influences on perception.

But after years of neglect, suspicion, and frustration, unconscious processes have now become an accepted topic for research in cognitive psychology. So-called subliminal perception has a new lease on life, and cognitive neuropsychologists offer a compelling view of unconscious memory. Social and nonsocial psychologists have documented the role of unconscious processes in learning and judgment, and explorations of intuition and insight raise again the idea of unconscious thought. These developments within the cognitive unconscious (Kihlstrom, 1987), a term introduced by Paul Rozin (1976), have set the stage for a

revival of interest in unconscious emotional and motivational processes as well. This attention to the trilogy of mind (Hilgard, 1980) gives a new interpretation of the psychological unconscious (Kihlstrom, 1990).

Interest in unconscious mental life, or information processing outside of conscious awareness owes its revival to work done by cognitive neuropsychologists with patients suffering from various forms of the amnesic syndrome. The recognition that neurological patients suffering from the amnesic syndrome show the persisting effects of past events that they cannot remember --- what Schacter (1987) has called implicit memory --- has made it possible to use concepts such as awareness and consciousness and to accept the idea of unconscious influence on experience, thought and action.

This research has provided empirical results that merit description in terms of unconscious cognition. These results come from experiments that use indirect tests for immediate or long-term residues of barely perceptible or attended but forgotten events. These well established phenomena are limited to relatively minor cognitive feats. Although unconscious cognition is now solidly established in empirical research, it appears to be very different than the unconscious portrayed in psychoanalytic theory. The unconscious in this sense contains implicit/tacit knowledge (Polyani, 1958; Schacter, McAndrews, and Moscovitch, 1988) which an individual has accumulated over a life

time. Even though this knowledge is unconscious and may be accessed indirectly it still influences thoughts and behavior.

With this theoretical perspective in mind, I shall give a brief history of the research done on unconscious cognition and then turn to specific experimental studies done by cognitive neuropsychologists that illustrate the cognitive unconscious at work.

2.1. Unconscious Influences of Unattended Inputs

Most of the behavioral phenomena that have been linked to the unconscious have well-established interpretations that make no reference to consciousnes. As an everyday example, consider the highly practiced actions of driving a car. These actions, which are performed without apparent mental effort and often without ability to remember what one has done, are described by some as being done unconsciously. Others prefer to describe such actions without reference to unconscious cognition, as being habitual or automatic, or as procedural knowledge. Similarly, some describe the partial monitoring that occurs for background conversations in a crowded room as unconscious, whereas cognitive psychologists would refer to it as preattentive. In the next few sections I will describe some of the research that will convince those who currently avoid speaking of unconscious cognition that this manner of speech can now be used quite respectably.

2.2. Empirical Evidence

The most general meaning of unconscious is "unaware of." There are two different senses of "unaware of" that appear in cognitive psychological research and theory.

If consciousness is interpreted as the selective aspect of attention, then one is unconscious or unaware of stimuli that impinge on receptors but fall outside of selective attention. If consciousness if interpreted as the ability to report experience validly, then one is unconscious or unaware of the occurrence, causes, or other attributes of events or actions when one cannot report those properties validly. Unlike the attentionless sense, this one presumes a) a language-using organism, b) a self-describing (reflexive) ability, and c) the existence of a valid reference decribing one's experience. As a consequence most studies of this sense of unconscious cognition involve failures to remember events that are known to have been attended. The major research questions associated with this verbally unreportable sense of unconscious cognition is, how are cognition and action influenced by failures to remember experienced-but-unrecollected events? Do unconscious ideas, impulses, and emotions dtermine and drive our conscious thoughts, perceptions, and behaviour? Or, as Greenwald (1992) puts the questions, "How smart is unconscious cognition?" Freud believed in the smart view of the unconscious. He used an 'iceberg' model of mind, in that only a small portion of the mind lay above the surface,

conscious, while the vast majority of mental processes take place below the surface, unconscious.

However, believers in a smart unconscious agree that the unconscious does not always do what is best. In fact, believers in a smart unconscious full embrace the idea that these processes that lie below the surface of awareness often lead people to react inappropriately.

2.2.1. Subliminal perception/Subception

Many laypersons persisted in the belief that the unconscious is smart enough to interpret messages and to control behaviour. One radio station launched a subliminal campaign against television by broadcasting slurs such as "TV's a bore." Some department stores played subliminal anti-shoplifting messages ("If you steal, you'll get caught") over public address systems (Wortman & Loftus, 1992). Responses to these subliminal messages were called subliminal perception or "subception" (Lazarus & McCleary, 1951). The authors interpreted their results as proving that stimuli exposed so briefly that subjects cannot notice them may still be processed outside conscious awareness and that their subjects had been able to discriminate stimuli without being aware of having any relevant knowledge. This early research on subception was criticized in a number of influential articles by Eriksen and his associates (Dulany & Eriksen, 1959; Eriksen, 1956, 1960, 1962) on both methodological and theoretical grounds. Their arguments discouraged further research on subliminal perception for many years. Then, in the 1970s, came a new look at

the New Look (Erdelyi, 1974); Greenward (1992) calls it "New Look 2." At that point, a cognitive revolution in the form of the information-processing approach to thinking about the mind had taken firm hold. The computer was now the favored model of the human mind, and with the computer metaphor came a bevy of theoretical constructs that "can close to constituting rediscoveries of basic Freudian notions." (Erdelyi, 1985, p. 59). The goal of New Look 2 was to draw connections between Freud and the cognitive psychology that had emerged in the late 1950s and 1960s (Erdelyi, 1974). The new cognition was described in terms of filtering and selectivity, rather than censorship. Proponents of the new cognition talked of executive processes; Freud had talked of the ego. Suddenly the very idea of unconscious processes was not only noncontroversial but was an "obvious and fundamental feature of human information-processing" (Erdelyi, 1985, p. 59). This introduction of new terms to talk about old ideas, the New Look 2 people argued, was not due to misgivings about the concept of the unconscious but to a disinclinations to be associated with the excess baggage that accompanies the idea of a psychoanalytic unconscious. In spite of the accomplishments of New Look 2, the unconscious continued to be regarded skeptically by many cognitive psychologists. Matthew Erdelyi (1992) argues that New Look was more than just the study of the unconscious. The lack of consensus on where the division between conscious and unconscious processes lies in the major stumbling block. To accept the most strict criterion of what is unconscious

apparently relegates the unconscious to unreliability and insignificance. Erdelyi points out the paralyzing effect of this lack of a clear conception of the unconscious has had empirical progress.

2.2.2. Information-Processing Paradigm of the unconscious

And so the problem returned in a new theoretical context involving an information-processing paradigm (Atkinson & Shiffrin, 1968; Deutsch & Deutsch, 1963; Kahneman, 1973; Posner, 1987; Posner & Synder, 1975). The classic information-processing concept of human cognition modeled after the computer, includes a set of structures for storing information, as well as a set of processes by which information is transferred from one structure to another. The cognitive unconscious in this approach characterized by a computational view (sometimes referred to as the "computer metaphor) of mental processing, which sees mentation as the manipulation of an internal representation ("mental model") of an external domain. In this model, information from the environment, is transduced into a pattern of neural impulses by the sensory receptors, and is briefly held in the sensory registers, one for each modality. Information in the sensory registers is then analyzed by processes known as feature detection and pattern recognition. By means of attention, information that has been identified as meaningful and relevant to current goals is then transferred to a structure known as primary or short-term memory where it is subject to further

analysis. At this stage perceptual information is combined with information retrieved from secondary or long-term memory. Primary memory, which has an extremely limited capacity to process information, is considered the staging area of the cognitive system, where processes such as judgment, inference, and problem-solving take place. Information resides in primary memory only so long as it is rehearsed. On the basis of an analysis of the meaning of the stimulus input, some response is generated; and finally, a trace of the event is permanently encoded in secondary memory.

The term "unconscious," in this approach describes those products of the perceptual system that go unattended or unrehearsed, and those memories that are lost from primary memory through decay or displacement before they can be encoded in secondary memory. In a more substantial sense, consciousness can be identified either with attention and rehearsal, or with the cognitive staging area that holds those percepts, memories, and actions to which attention is being directed. Thus, unconscious mental life is identified with early preattentive perceptual processes such as feature detection and pattern recognition; or with those latent memory traces that have not been retrieved from secondary storage and transferred to primary memory. The implication of this view is that unattended percepts and unretrieved memories make no contact with higher mental processes. Therefore, the classic information-processing model, by regarding attention and rehearsal as prerequisites for

cognitive analysis of the stimulus, and by implicitly identifying consciousness with higher mental processes, leaves little or no room for the psychological unconscious.

A major place for unconscious mental structures and processes has been created by a variant of information-processing theory known as connectionism or parallel distributed processing (PDP). In PDP models the conceptual analog for the human information-processing system is provided by the brain itself, and the synaptic connections among neurons, rather than the microchips of the high-speed computers. PDP models posit the existence of a large number of processing units, each devoted to a specific task. Each unit, when activated, excites and inhibits others along a network of associative links. This pattern of mutual influence continues until the entire system relaxes to a steady state of activation that represents the information being processes.

It is assumed in PDP models that information about an object or event is distributed widely across the processing system, rather than localized in any particular unit. The activation of individual processing units can vary continuously as opposed to discretely. For these reasons, it is not necessary for an object to be fully represented in consciousness before information about it can influence experience, thought, and action. Traditional information-processing theories tend to assume that various perceptual-cognitive functions are bound together in a unitary processing system operating under a single set of rules and under

the control of a central executive. By contrast, PDP models assume the various systems (such as supporting perception and language, for example) operate independently and under different rules. Only some modules are assumed to be accessible to awareness and subject to voluntary control. PDP models also abandon the traditional assumption that information is processed in a sequence of stages. Parallel processing permits a large number of activated units to influence each other at any particular moment, so that information can be analyzed very rapidly. Both the number of simultaneously active processing units and the speed at which they pass information among themselves may exceed the span of conscious awareness.

PDP models of information processing assert that consciousness is a matter of time rather than activation. By virtue of massive parallelism, processing systems tend to reach a steady state very rapidly, within about a half-second. At this point of relaxation the information represented by the steady state becomes accessible to phenomenal awareness. Information may reach consciousness if the relaxation process is slowed by virtue of ambiguity in the stimulus pattern; in this case, the contents of consciousness will shift back and forth between alternative representations. The implication of the PDP framework is that conscious processing is slow and sequential. In contrast to multi-store information-processing theories that restrict the cognitive unconscious to elementary sensory-perceptual operations, PDP models seem to consider almost all information

processing, including the higher mental functions involved in language, memory, and thought, to be unconscious. This model appears to support the notion that the cognitive unconscious encompasses a large part of mental life.

2.2.3. Recovery Paradigm of the unconscious

The recovery paradigm of the unconscious[56] is realized when a subject who cannot access some information at a certain time manages to access it at a subsequent time. The subject recovers into consciousness information that s/he could not recall initially. This information had to come from somewhere---an available but inaccessible, unconscious region of mind. The availability of the inaccessible material is revealed by its eventual recovery into consciousness. The unconscious is not defined in its 'own terms' but rather with reference to consciousness/awareness. The logic of this paradigm is straightforward; if in the absence of further external information the recovered information, especially if it involves episodic memories, must have come from some unconscious buffer.

2.2.4. Dissociation Paradigm of the unconscious

In the dissociation paradigm[57] of the unconscious, 'unconscious mentation' is defined in terms of observed discrepancies in accessibility to consciousness, and thus illustrates the relational nature of the constructs of consciousness and unconsciousness. The unconscious is defined relative to the conscious and not in its own terms. If the amount of information that is available is greater than the information

that is accessible to consciousness, then the inaccessible but available information is unconscious. In this paradigm of the unconscious, 'unconscious mentation' is defined in terms of observed discrepancies in accessibility to consciousness, and therefore illustrates the relational nature of the constructs of consciousness and unconsciousness. The activity of consciousness is shown to affect the information accessible to itself---one causal property of consciousness.[58]

2.2.5. Implicit Memory

Because preconscious processing appears to be mediated by the activation of relevant mental representations already stored in memory, the question is raised whether analogous effects may be observed in memory itself. Just as there are tangible effects on experience, thought, and action of stimuli that cannot be consciously perceived, so there may be similar effects of events that cannot be consciously remembered. One such effect was observed in an experiment by Nelson (1978) in relearning. The subjects were asked to memorize a list of paired associates consisting of a number and a word arbitrarily linked together. Four weeks later they were given tests of cued recall and recognition for these items. When forgotten pairs were presented along with entirely new pairs on a second set of learning trials, previously seen items that were not consciously recognized had an advantage measured in performance on subsequent learning and memory tasks.

Some of the most dramatic examples of nonconscious memory appear in cases of the amnesic syndrome, which results from bilateral damage to the medial temporal lobe[59] and diencephalon.[60] Patients suffering from this disorder exhibit gross anterograde amnesia, meaning that they cannot remember events that occurred since the onset of the brain damage; other intellectual functions remain relatively intact. Although it was originally thought that amnesic patients were unable to encode traces of new experience, it now appears that their memory deficit is much more selective. For example, amnesic patients can learn new cognitive and motor skills, as well as new vocabulary items and other factual information; however, they appear unable to remember the episodes in which they acquired this knowledge (Graf, 1984; Cohen & Squire, 1980). In other words, the amnesic syndrome appears to impair the encoding of new episodic memories, while sparing procedural knowledge and semantic memory.[61]

Recent research evidence suggests that some aspects of episodic memory are preserved in these patients (Schacter & Graf, 1986). For example, a case in which subjects were asked to study a list of familiar word and are asked to recall the words shortly thereafter. Compared to the performance of intact subjects, amnesic patients show gross impairments in memory. Different results are obtained when the subjects are asked to identify briefly presented words or to complete a word stem or other fragment with a meaningful word. Intact subjects show superior

performance on trials where the correct response is a word that had appeared on the previously studied list, compared to trials where the correct response is an entirely new word. This advantage of old over new items reflects a sort of priming effect of the previous learning experience. However, amnesic subjects also show normal levels of priming, despite the fact that they cannot remember the words they studied. In addition Schacter and his colleagues provided amnesic patients with obscure factual information in a question and answer format. On later test trials, the patients were able to correctly answer questions on the material, but could not remember the circumstances under which they had acquired the information - a phenomenon know as source amnesia (Schacter, 1986; Schacter et. al., 1984). Patients remember the content of a prior event but not its source. What they commonly do under a task demanding identification of the source is to make up a source which they quickly believe to be real.

2.2.6. Implicit/Explicit Memory Distinction

Priming and source amnesia show that task performance may be affected by residual memories of prior experiences, even though those experiences are not accessible to conscious recall. On the basis of these results, Schacter and others have drawn a distinction between explicit and implicit memory (Schacter & Graf, 1986). Explicit memory requires conscious recollection of a previous episode, whereas implicit memory is revealed by a change in task performance that is attributable to information acquired

during such an episode. Milner, Corkin, and Teuber (1968) demonstrated many years ago that the well-known amnesic patient H.M. could acquire gradually across trials and sessions various perceptual and motor skills, even though he lacked any explicit memory for the episodes in which he acquired the skills. Similar examples of intact skill learning despite impaired explicit memory have been since reported by many others (e.g, Brooks & Braddeley, 1976; Cohen & Squire, 1980; Kinsbourne & Wood, 1975; Moscovitch, 1982). Along these same lines, Glisky, Schacter & Tulving (1986a,b) were able to show that, with months of practice, amnesic patients could acquire and retain complex knowledge and skills needed to program and interact with a microcomputer even though, when queried at the beginning of a learning session, some of these patients consistently failed to remember explicitly that they had ever worked on a microcomputer.

Literature from both patient and nonpatient populations indicates that people can display implicit memory without having any conscious recollection of the experiential basis of the effect. Implicit memory effects are conceptually similar to subliminal perception effects, in that both reveal the impact on experience, thought, and action of events that are not accessible to conscious awareness. The two effects should be distinguished. In contrast to subliminal perception, the events contributing to implicit memory effects were clearly detectable by the subject, attention was devoted to them, and they were represented in phenomenal awareness at the time they occurred.

2.2.7. Implicit Knowledge as basis of the unconscious

These research studies on implicit memory represent examples of preserved implicit knowledge in neuropsychological syndromes. Schacter, McAndrews, and Moscovitch (1988) were able to pull evidence from a number of neuropsychological syndromes that were characterized by a common feature: it provides compelling evidence for the existence of implicit knowledge despite patients' serious deficits on standard tests of explicit knowledge. These researchers refer to implicit knowledge as knowledge that is expressed in performance without subjects' phenomenal awareness that they possess it. We sometimes use the phrase 'failure to gain access to consciousness' to describe those situations in which implicit knowledge is expressed in the absence of explicit knowledge. Explicit knowledge refers to expressed knowledge that subjects are phenomenally aware that they possess. Although the exact definition and assessment of implicit knowledge differs in the various clinical and experimental situations that we consider, the emphasis in all cases is on a patient's lack of reflective awareness of knowledge that is revealed in task performance. Schacter goes on and asserts that, 'no claim is being made that performance of a task that taps implicit knowledge is any less "conscious" than performance of a tasks that taps explicit knowledge....what is not conscious in certain cases, however is the knowledge that is expressed in task performance. It is the knowledge expressed in task performance, rather than the carrying out of the task itself

that one would want to characterize as implicit or perhaps "unconscious"[62]'. Polanyi (1958) calls this "tacit knowledge" -- knowledge not normally present in our conscious experience, not because it is repressed, but because it is implicit and not spelled out, accessible through the Recovery Paradigm and Dissociation Paradigm, revealed indirectly as shown by dissociation and recovery theory. This knowledge is a passive body of knowledge (versus dynamic) and is not a function of unconscious processing.

In the syndrome of prosopagnosia,[63] patients report no familiarity with the faces of family,relatives, and friends. However, research reported by Bauer (1984) and also by Tranel & Damasio (1985), using psychophysiological indices, has established that prosopagnosic patients possess some implicit knowledge of facial familiarity. For example, Tranel & Damasio (1985), found that a severely prosopagnosic patient showed larger skin conductance response to familiar faces, even though none of the faces seemed familiar to the patient. In a series of studies that have used more analytical behavioral techniques, de Haan, Young, and Newcombe (1987; Young & de Hann, 1988) have reported data that support and extend the psychophysiological findings. One of their patients was entirely unable to distinguish explicitly between familiar and unfamiliar faces. On a matching task that required same-different judgments about two simultaneously exposed faces, this patient, like control subjects, was faster to respond when a judgment was made about

familiar than unfamiliar faces, thereby demonstrating some access to facial familiarity information. In addition, the patient was subject to interference from familiar faces-even though he did not recognize them explicitly-on a Stroop-like naming task,[64] and also showed priming effects that required implicit though not explicit access to facial familiarity information.

Implicit knowledge as the basis of the unconscious challenges the traditional Freudian notion of the unconscious in the following areas: a) it is a passive body of knowledge (versus dynamic); b) not a function of unconscious processing; c) not normally present in our conscious experience not because it is repressed; d) over rides reasoning; and e) is accessed indirectly.

The results of these and other experiments, lead to a taxonomy of nonconscious mental structures and processes representing the domain of the cognitive unconscious (Kihlstrom, 1984). Consciousness is not to be identified with any particular perceptual-cognitive functions such as discriminative response to stimulation, perception, memory, or the higher mental processes involved in judgement or problem-solving. All of these functions can take place outside of phenomenal awareness. Rather consciousness is an experiential quality that may accompany any of these functions. The fact of conscious awareness may have particular consequences for psychological function---it seems necessary for voluntary control, for example, as well as for

communicating one's mental states to others. But it is not necessary for complex psychological functioning.

3. Psychoanalytic unconscious vs cognitive unconscious

In this chapter I will compare unconscious mental processes emerging from cognitive psychology and to the psychoanalytic unconscious in Depth Psychology. This comparison will reveal that Freud's claim that there are unconscious mental processes is supported by recent work (Eagle, 1987; Erdelyi, 1985; Wegman, 1985 etc.), there are important differences between his concept of the dynamic unconscious and the cognitive unconscious. These differences have to do with the role of repression, recoverability of unconscious contents and processes, inaccessibility, and unconscious influences.

The tendency to study the interaction of cognitive and dynamic processes in the unconscious was preceded by the development of two discrete research traditions in the late 19th and 20th century. One tradition, associated with Helmholtz (1867), Wundt (1832-1929), et. al., was experimentally oriented, and regarded the unconscious as an essentially rational phenomenon implicated in audio-visual perception. The other tradition, associated with Freud (1856), Prince (1929/1970), Janet, (1959-1947) etc., was clinical in outlook, and viewed the unconscious as the repository of irrational, instinctual impulses that are ego-alien, or split off from the rest of the conscious personality.

Psychoanalysis explicates psychological disturbances by means of dynamic hypotheses relating current difficulties to antecedent conditions and causes, (i.e. to disturbances in psychosexual development), which give rise to the intrapsychic processes that cause (and express) anomalies in the individual's experience of himself/herself and others in the world. To account for the empirical uniformities that crop up repeatedly in treatment, psychoanalysis was obliged to posit some model of mental and developmental processes. Psychoanalysis arose as a variety of abnormal psychology, and it is within this framework that the dynamic unconscious first captured attention.

By contrast the cognitive unconscious is designed to explain how cognitive and sensory inputs are processed in order to render a more or less accurate picture of external reality. While Freud was impressed with the irrationality of the unconscious, his colleagues in experimental psychophysics were interested exclusively in its silent, inarticulate reasonings.[65]

Perhaps the most obvious difference between the psychoanalytic unconscious and cognitive unconscious is suggested by the term "dynamic unconscious" in the psychoanalytic literature.[66] The Freudian "dynamic unconscious" consists mainly of id impulses, in Freud's words, "a cauldron full of seething excitations"[67] whose primary nature is to strive for immediate gratification, independent of consequences of reality. Freud did not consider the possibility that cognition and thought could have their own structure and development, independent of instinctual drive. In

Freudian theory of unconscious mental processes always reveal their links to derive gratification and are characterized by primary processes such as irrationality, illogicality, displacement, etc.

Another important set of differences between the psychoanalytic and cognitive unconscious has to do with the former's emphasis on repression and recoverability. What prevents full expression in consciousness of instinctual wishes is the process of repression, which is itself unconscious. The "dynamic unconscious" is a repository of repressed contents. It is further claimed that when this active process is removed (i.e. through the therapeutic process), the unconscious contents are recoverable and are consciously experienced exactly as those contents would have been experienced had not the process of repression prevented it.[68]

3.1. Repression

The psychoanalytic account of repression assumes that cognizant unconscious agency, aware of ego-threatening memories, prevents those memories from being consciously retrieved and thereby causing distress.

In the psychoanalytic theory of repression, rather than being deactivated, instinctual impulses continue to press for direct expression in behaviour and experience and find indirect expression in symptoms, dreams, etc., and if one includes sublimation, in all behaviour. The essence of repression is not that information is not processed, but that information that is

processed is not experienced in conscious awareness and not integrated into one's self-organization.

What is not clear in the comparison between cognitive psychology and repression is what role cognitive psychology should play in psychopathology. In the context of Freudian theory, the relationship between instinctual impulses and the consequent importance of drive discharge (Freud, 1923,1926), one can understand that repression would be seen as the primary pathogen of neurosis. But why should "deactivation," be associated with psychopathology?

Reformulations of repression in terms of cognitive theory often omit the properties essential to repression. They also do not make clear, on theoretical grounds, the connection between the stipulated cognitive processes (e.g. defensive exclusion, lack of full processing) deemed to be analogous to repression and the development and maintenance of pathology. Furthermore, of critical psychoanalytic concern is not so much information processing, but the _fate_ of the information processed, the extent to which the information is integrated into the individual's self-organization and the processes underlying the degree of success or failure in accomplishing such integration. And what about implicit knowledge and repression? So far, cognitive psychology has little to say regarding these issues.

3.2. Recoverability

The concept of repression in the "dynamic unconscious" (as a repository of repressed contents) claims that unconscious

contents are _recoverable_ in conscious experience. Here the emphasis is on contents and unconscious representations. In contrast to this view, the processes emphasized in cognitive psychology are generally not recoverable in conscious experience. Recoverability may be a function of the contrast between the psychoanalytic emphasis on contents (i.e. unconscious contents that were once conscious) and the emphasis of cognitive psychology processes. One tends to consciously experience contents rather than the processes leading to these contents (Nisbett and Wilson, 1977a). The processes emphasized in cognitive psychology are generally not recoverable, i.e. "unconscious inferences," and not expected to be directly represented in conscious experience. While they can be described as if they were available to awareness and while they are "reflected" in perceptual and cognitive products, these processes are simply not phenomenally present in conscious experience. In psychoanalytic theory, too, while repressed unconscious contents are held to be recoverable in consciousness, the _process_ of repression is not recoverable in conscious experience (Mullane, 1983).

A central assumption contained in the psychoanalytic idea of repression and recoverability is "identity assumption" (Marcel 1983a,b). The assumption is made that a particular unconscious content that is now experienced consciously is _identical_ to the unconscious content that was repressed. The notion of the "timelessness of the unconscious" supports the idea that

unconscious material (e.g. impulses or a painful childhood experience) emerges in consciousness, following the lifting of repression, is identical to the earlier unconscious material (e.g. impulses or a painful childhood experience) rendered unconscious by repression. Marcel (1983a,b) points out the "identity assumption" has also characterized conceptions of perception and memory (i.e. a percept was viewed as a copy of a physical object), was a record of an event that, when recovered through recall, produced the record.

In contrast, the contemporary constructivist view to the "identity assumption," argues that consciousness and the phenomenal experiences that comprise it are constructions. A perception is not a copy or replica of physical reality, but a constructive process that "attempt(s) to make sense of as much data as possible..." (Marcel, 1983b). Freud (1937) himself recognized that memories are generally constructions reflecting one's current state at least as much as the purported event. However, Freud did extend this insight to unconscious wishes, ideas, and impulses. For these categories, Freud adhered to the "identity assumption," as if unconscious wishes, ideas, and impulses were wholly formed and following the removal of the repression barrier, made their appearance in consciousness, in unaltered form. Mandler (1983) and Marcel (1983b) suggest that conscious experiences are constructions that depend on the particular unconscious and preconscious schemata that have been activated. In this theory the relationship between the

unconscious and conscious, the unconscious (and preconscious) is not a storehouse of wishes and impulses waiting to become conscious, but a mental structure of features, schemata, etc., that are drawn upon by, but not identical to, conscious experience.

The "identity assumption" makes it appearance when Freud discusses the "dynamic unconscious" and the role of repression. Through these concepts Freud is attempting to explain phenomena in which an impulse etc., experienced at one time was then banished from consciousness but seemed to continue to influence experience and behaviour (e.g. symptoms). That is, in some way the person continues to behave as if s/he harbours the banished impulse. It is easy to understand why Freud thought of the repressed impulse, etc. as continuing to exist in its original form in the unconscious.

One may conclude that although recoverability may or may not be a real difference between the psychoanalytic and the cognitive unconscious, its importance is diminished when one rejects the "identity assumption." Making the unconscious is never a matter of direct recoverability.

3.3. Inaccessibility

In Freud's distinction between two kinds unconscious, one which is latent and easily recoverable into consciousness, called the preconscious and the other in which recoverability is difficult or not available he called the dynamic unconscious. The dynamic unconscious then becomes the "inaccessible" (Freud, 1917,

p.93), and links up with the cognitive psychology usage (Tulving and Pearlstone, 1966),[69] and the preconscious corresponding to "accessible" information and the unconscious to the "available but inaccessible." In the preconscious there is some degree of accessibility. But one should distinguish between two different types of inaccessibility in the unconscious as conceived by someone like Chomsky,[70]and the Freudian unconscious. Chomsky, when talking about the unconscious mental structures which predispose one to speak creatively, hear and understand sentences which one has never heard before, would say that the structure which allowed one to do this was radically inaccessible to consciousness and could not be retrieved. But not because it is repressed.

3.4. Unconscious Influences

Can techniques that rely on unconscious processes be used to make me act in ways that are counter to my own purposes? This pragmatic question one may ask seems to have little to do with problems of definition, thresholds, or experimental design---problems that have occupied cognitive psychologists. As noted in the research done by Jacoby et al (1992), Bowers (1984) and others, unconscious influences are very common. People sometimes consciously plan and then act, but more often behavior is influenced by unconscious processes; that is, people act and then, if called upon, make their excuses.

The importance of unconscious perception, as distinct from unconscious drives and motives is that perceptions can occur

without noticing and what is noticed need not be comprehended or understood. According to this view, determinants of thought and action that are not noticed or appreciated as such constitute unconscious influences (Bowers, 1984) is consistent with the psychoanalytic notion of unconscious influence which is largely intrapsychic (the repressed unconscious) but is also consistent with contemporary social cognition accounts which emphasize how external conditions exercise unconscious influence over thought and behaviour (e.g. Nisbett & Wilson, 1977; Nisbett & Wilson 1977a, 1977b).

In summary, the concept of the unconscious presented by cognitive psychology, refers to unconscious processes, whose products are accessible to reflection, but which are not in themselves perceived by the subject. On the other hand, the cognitive unconscious also refers to processes where both the process and the product are unconscious, albeit without necessarily being repressed. Here an individual knows something, but without knowing that s/he knows it (i.e. Polanyi's 'tacit knowledge'). Finally, both process and product are unconscious, the difference being that: what is cognized here are not perceptual data or logical transformations, but data about one's own or another's intrapsychic processes. Research in cognitive psychology supports the theory that an individual is assaulted by more sensory information s/he can consciously assimilate. What Freud presents us with and what cognitive psychology has

inherited from Freud is his belief that there are unconscious aspects of consciousness.

The point is that contemporary research on unconscious mental life is dismissed on the grounds that Freud had said it all before and that experimental work is trival or merely a gloss on the clinical insights of psychoanalysis. To the contrary, it is important to recognize that much of this research would never have been done had Freud never lived.

More importantly the psychological unconscious documented by latter-day scientific psychology is very different from what Freud and his psychoanalytic collegues had in mind. Their unconscious seethed with lust and anger; it was hallucinatory, primitive, and irrational. The unconscious of contemporary psychology is kinder and gentler than that.

4. Development of Yogācāra: History and Texts

The origins of the Yogācāra tradition in India are mostly lost to us. The few pieces of available scriptural evidence are so problematic that it is difficult to formulate any definite historical conclusions. In this chapter I will give a historical overview of the development of the Yogācāra. In order to do this I shall designate four phases of the Yogācāra tradition and will provide the major texts available for each.

Yogācāra[71] is considered one of the four great traditions of Indian Buddhism (along with the Sarvāstivāda, Sautrāntika, and Mādhyamika). The founder of the tradition was Maitreyanātha,[72] followed by Asaṅga,[73] who systematized Yogācāra, and by Asaṅga's

younger brother and disciple Vasubandhu who completed the system and developed its philosophical views. The particular doctrinal stance of this school is suggested by its alternate name, Vijñānavāda, or the "Doctrine" (vāda) that all phenomenal existence is fabricated by vijñāna.[74]

The first phase can be characterized as the pre-systematic phase and includes some scattered mentions of key Yogācāra themes in scriptural texts known as sūtras,[75] supposedly containing the words of the Buddha, which span a period from the second to the fourth centuries AD. The key theme here is that the universe in toto is a mental phenomenon, that the only thing which actually exists is mind.[76] The earliest surviving version of this theme occurs in a scriptural text originally composed in Sanskrit but now extant only in Chinese translation dated to 179 AD. Thereafter, the assertion that everything is mind occurs not infrequently in scriptural texts, until the explicit uses of it in the Sacred Text Which Reveals What is Hidden (Saṃdhinirmocanasūtra)[77] from the fourth century A.D.[78]

The second phase may be called the early systematic phase and is preserved in the text entitled States of Spiritual Practice (Yogācārabhūmi) and what is known, following the Tibetan tradition, as the 'five books of Maitreya'. There are four major works representing the early systematic phase of Indian Yogacara: The Stages of Spiritual Practice (Yogācārabhūmi), The Ornament of the Sacred Texts of the Great Vehicle (Mahāyānasūtrālaṃkara), The Discrimination Between Middle and Extremes (Madhyāntavibhāga) and

The Discrimination Between Things and Reality (Dharmadharmatāvibhāga).

The first, Stages of Spiritual Practice (Yogācārabhūmi), is a large work, partially extant in Sanskrit and entirely extant in both Tibetan and Chinese;[79]it is attributed by both the Buddhist traditions and by Western scholarship, to Asanga. This attribution is not unproblematic; it is probable that the Stages is, as Lambert Schmithausen suggested, a scholastic compilation rather than a work of a single author, since it seems to show internal evidence of growth and change.[80] The Samahitabhūmi of the "Basic Section" in the Yogācārabhūmi represents the starting point of ālaya-vijñāna theory.[81]

The last three works mentioned differ from the Stages in that they all consist of verses together with a prose commentary or commentaries. The verses alone, in all three cases, are attributed by the Tibetan tradition to the semi-mythical figure of Maitreya.

The third phase or 'classical' phase in the development of the Yogācāra tradition produced an integrated systematic soteriology epitomized by the works of Asaṅga and Vasubandhu.

The textual sources for the study of this phase are: Asaṅga's Compendium of the Great Vehicle (Mahāyānasaṃgraha)[82] and the Summary of Metaphysics (Abhidharmasamuccaya),[83] as well as which parts of the Stages of Spiritual Practice can be attributed to him. From Vasubandhu we have a commentary to Asaṅga's Compendium, and three short works: the Treatise of Twenty Verses

(Vimśatikā-vijñaptimātratāsiddhi),[84] the Treatise of Thirty Verses (Trimśikā-vijñaptimatratāsiddhi)[85] and the Treatise of Three Aspects (Trisvabhāvanirdesa).[86] The Vimśatikā-kārikā (with Vimśatikā-vrtti) and the Trimśikā-kārikā together make up the Vijñaptmatrata-siddhi,[87] "Establishing That There is Vijñapti-Only.[88]

The fourth and final phase of Yogacara consists of the commentarial phase. All the texts mentioned attracted the attention of later commentators, such as Dharmapāla, Sthiramati and Asvabhāva, who developed and added new philosophical emphases. Notably there are Sthiramati's commentaries to Asanga's Summary of Abhidharma and Vasubandhu's Thirty Verses and Asvabhāva's commentaries to The Ornament of the Sacred Texts of the Great Vehicle and to Asañga's Compendium of the Great Vehicle.

5. Yogācāra Tradition

5.1. Ontology

The basic ontological position of the Yogācārins of the classical period is that there is nothing but mind (cittamātra). Many ways of making this assertion are found in the scriptural texts of Asañga and Vasubandhu who sought to show that what we conventionally take as existing does not really exits, and that it is precisely this mis-perception that perpetuates our patterns of unwanted behaviour and inhibits us from the liberation to be experienced in breaking free from these unwanted patterns. Vasubandhu makes a clear statement of this position at the

beginning of his Twenty Verses.[89] He says that the entire cosmos, standardly divided into three 'aspects' (trisvabhāva) by Buddhist cosmologists, is nothing but 'representation' (vijñapti). It is a technical term which refers to all mental events with intentional objects, all mental events wherein something is 'represented' or communicated to the experiencer. This means that, for example, all events of sense-perception are necessarily also instances of 'representation'. The meaning of vijñapti is derived directly from designating 'x' to be 'y', as when the Dependent (paratantra) is mistaken and then clung to in its Imaginary (parikalpita) aspect in the Buddhist 'three' aspect theory (trisvabhāva). Both Asaṅga and Vasubandhu seem to be focusing on the activity of taking one thing as another, or in an epistemological context, the process of concept formation. If consciousness is conceived exclusively on an intentional model, involving the idea that to be conscious is always to be conscious of something, it would seem that all mental events will have to be understood as instances of 'representation' since all of them have intentional objects and all of them 'represent' something to the experiencer.

The Yogācārins recognized that experience has three aspects (trisvabhāva).[90] Vasubandhu defines them as:

> The three aspects are the imagined, the relative, and the perfected. This is said to be the profound thing which wise men know.
>
> That which appears is the relative because its occurs in dependence upon conditions. The way in which it appears is the imagined because it is simply imagination.

> The eternal non-existence of the mode of appearance of what appears should be understood as the perfected aspect; this is because it does not change.[91]

The three aspects are the 'imagined' (parikalpita),[92] the 'dependent' (paratantra),[93] and the 'perfected' (pariniṣpanna).[94] These are not ontologically distinct. The importance of the three aspect theory is evident, since two of these aspects, the "dependent" one (paratantra) and the "imaginary" one (parikalpita) constitute the empirical and the third one, the "perfected" aspect (pariniṣpanna), is the Absolute reality. In the Mahāyānasaṃgraha, Asaṅga sets forth the view that the imagined and the perfected are two aspects of the dependent nature; the dependent nature appears as the imagined nature by dint of a false imagination and as the perfected nature when the false imagination is removed. In summary, the consciousness that arises in each moment with the image of an object is of dependent nature because its origination is dependent on the impressions of experiences preserved in the ālaya-vijñāna.

5.2. Ālaya-vijñāna

The ālaya-vijñāna theory may be understood as an attempt to systematize an image of seed and growth. The image of seed and growth was used in Buddhism before the period of classical Yogācāra and was prominent in the works of the Sautrāntika theorists.[95] In this image each action deposits 'seeds' (bījas) in the continuum of caused momentary events which comprises the 'person' who performed the action, and these seeds may have no immediate effects upon the continuum. Only later will they

'mature' and bear fruit, which means that only later will they have specifiable effects upon the future of that continuum wherein they were originally planted. The Sautrāntika theorists, who first made use of the seed-image, did not provide a systematic answer to such questions as: where are the seeds located while they are ripening? Real seeds require some basis, some earth in which to grow. Can the seed-image be extended this way, and if it can what sort of basis is intended? The systematic answers were provided by the Yogācārins who stated that there is such a basis and it is called the ālaya-vijñāna,[96] each individual having their own ālaya-vijñāna.

5.2.1. Definition

The Vijñaptimātratā-triṃśikā describes the ālaya-vijñāna as follows:

> "The first (transformation is ālaya-vijñāna, or vipāka (distinctly matured) or sarvabījaka (possessed of all seeds)".[97]

In this remark three characteristics of this vijñana are distinguished,that is, ālaya-vijñāna as the self-characteristic, vipāka as the effect-characteristic, and sarvabījaka as the cause-characteristic.

Ālaya-vijñāna has been rendered with a number of different names: mind-basis-of-all, store consciousness, foundation consciousness, grunderkennen (Frauwaller), connaissance-receptacle (Lamotte), or connaissance-tréfonds (Lévi), etc. The word ālaya-vijñāna is from the Sanskrit verb ālī - meaning to cling to, adhere to, alight one, or be hidden in. The nominal

form of ālaya can mean a firm or fundamental base, and by extension is used to refer to a dwelling or home.[98]

5.2.2. Structures of consciousness

The Yogācārins explicated an "ontological-psychological" model for outlining the evolution of consciousness. Consciousness (vijñāna) impelled by former deeds,[99] evolves in eight forms: in addition to the traditional six kinds[100] of vijñānas, i.e. the five sense-perceptions and non-sensory cognition (mano-vijñāna),[101] there are two more or less unconscious forms, the seventh is the manas[102] and the eighth is termed the ālaya-vijñāna. The former is a continuous, subtle notion or feeling of 'I' whereas the latter, may be characterized as the container or store-house of latent residues or impressions of previous action and mind processes or as following the usual Tibetan translation 'kun gzi rnam par ses pa' ("Fundamental mind," "Grunderkennen").[103] The eighth vijñāna according to the Yogācārins is the "underlying consciousness" of all mental activity. It is distinguished from the other seven vijñānas which are said to be the antecedents of mental processing or "mind as it comes forth or manifests itself in a (cognitive) act" (pravṛtti-vijñāna). If the activity of manas is partially conscious and partially unconscious as indicated, then the activity of the eighth vijñāna is totally unconscious.

The Yogācārins were specialists in the practice of meditative trance, and as a result of this practice they felt that the six structures did not exhaust the full range of mental activity: it

could not account for some of the "special" or "altered" states[104] of cognition they had experienced in meditation. They pointed out, that there must be some additional mode of mental activity to account for the continuity of the individual personality through periods when the first six structures are inoperative.[105] To solve this problem they proposed the addition of two further structures: manas and the ālaya-vijñāna.

5.2.3. Function

The ālaya-vijñāna is functionally defined as the activity of vijñāna that maintains certain types of behaviour and perceptions. It is metaphorically called the receptacle for Karma[106] because it is the result (vipāka)[107] of past karma in the form of "impressions" (vāsanā) or habits, which condition future karmas as "seeds" (bījas) or stimuli.[108] While the ālaya-vijñāna is latent, the six kinds of vijnanas and the manas are in manifest activity and are thus called the "consciousness in action" (pravṛtti-vijñāna). The ālaya-vijñāna and pravṛtti-vijñāna are dependent on each other: the latter is produced from the seed (bīja) preserved in the former and leaves, in turn, its impression on the former. Thus the "modification" (pariṇāma), or "change" of vijñāna takes place in two ways: (1) a seed (bīja) planted by the "consciousness in action" (pravṛtti-vijñāna) becomes ripe in the ālaya-vijñāna; and (2) the "consciousness in action" arises from the seed. The term "pariṇāma" was first used in this context by Vasubandhu, but the theory of the mutual

dependence of the ālaya-vijñāna and the pravṛtti-vijñāna was formulated by Asaṅga in the Mahāyāna-saṃgraha.

The ālaya-vijñāna forms a "stream" of successive moments, as one vijñāna is replaced by another vijñāna in the next moment that continues to flow until the bījas planted in it are completely destroyed. In each moment there arises the pravṛtti-vijñāna, and so forth until a conceptualization is formed. An individual is a "stream of these consciousnesses" (cittasantana) and empirical reality is only the projections that appear in the "stream of consciousnesses."

Since this consciousness continues (pratisamdadhāti) and since it appropriates to itself (upādādati) the body (kāya), it is called the appropriating consciousness (ādānavijñāna). Because the seeds (bīja) of all the dharmas lie therein (ālīyate), it is called the receptacle-consciousness (ālaya-vijñāna). It is the retribution (vipāka) of actions laid down in past lives (purvajanman), it is also call retribution-consciousness (vipākaphalavijñāna).[109] The theory of ālaya-vijñāna suggests that an individual's actions sow seeds in the individual's ālaya-vijñāna; these seeds in turn produce or are perhaps predispositions, character traits, future possibilities of action. They are located in the ālaya-vijñāna and will mature and have their effects upon the functions and activities of the individual in the future. The ālaya-vijñāna is clearly also related to the 'three' aspect theory (trisvabhāva) mentioned earlier. Essentially it is the cause of the relative aspect of

experience, since it is only in virtue of the seeds and tendencies accumulated in the ālaya-vijñāna that conscious experience can occur at all.[110] It is also the cause of the imagined and perfected aspects of experience, since these differ one from another only in the mode under which they operate. The ālaya-vijñāna is not only important because of its role in the dynamics of unconscious mental functioning,[111] but also because it is an anticipation of the theory of the unconscious in Depth psychology.

5.3. Eightfold Proof of Ālaya-vijñāna

As a criticism against the Hindu orthodox systems, the early Buddhist schools maintained the doctrine of no-ātman (an-ātman) or no-soul system which tried to deny the eternal unchanging soul as such.[112] The Buddhists maintained a soul is nothing but "stream of consciousness" (cittasantana). This model of personality was primarily perceptual in nature, the underlying assumption being the momentary character of consciousness. But the stream had another property: it could only sustain one type of consciousness at one time, although the past moments of consciousness made up the basis for subsequent moments of perceptions, which was the principal function of consciousness. The problem arose in three specific areas: moments of unconsciousness, the time between death and rebirth, and the problems of karmic maturation. Yogācārins, therefore, felt it necessary to postulate "the underlying consciousness" (ālaya-vijñāna), which supports the sense consciousness, the mental base

which supports all the seeds (sarvabījakacitta), and the appropriating consciousness (ādāna-vijñāna) which is the element responsible for the transfer of potentialities from one existence to the next (continuity of personality).[113]

The ālaya-vijñāna is employed by the Yogācārins in these contexts to show its indispensability by moulding them into proofs of its existence.[114] This proof is found in both Asaṅga's Yogācarābhūmi[115] and in Sthiramati's commentary to Asaṅga's Abhidharmasamuccaya (Summary to Metaphysics).[116] Each argument has the form of a negative conditional: without the ālaya-vijñāna certain phenomena cannot be explained or cannot occur, phenomena which do occur and which thus require an explanation. Not postulating the element entails certain undesirable consequences (dosa), and therefore the element must be postulated. The psychological implication here is that the ālaya-vijñāna may be the root or matrix of all conscious acts.[117]

5.3.1. Summary Verse

The eightfold proof begins with a summary verse (uddāna), proceeds with a brief statement of each of the eight arguments and then gives a detailed presentation of each argument.

5.3.2. Impossibility of Appropriating a Physical Form

The 'appropriation' of the physical form by the consciousness is dependent on the existence of the ālaya-vijñāna. This first proof explains the 'appropriation' or taking on a physical body and the need to postulate the ālaya-vijñāna in order to explain this process. According to Buddhist theories

about death and rebirth, every person undergoes more than one life and therefore possesses more than one physical body over time. That is the individual does not cease to exit when the physical body dies. Although this position is modified in Buddhism because of idiosyncratic non-substantialist theories about what an individual is, it is still necessary for Buddhist theories to provide some account of how new bodies are 'appropriated' at the beginning of new lives. And the first proof states that without the ālaya-vijñāna no such account can be given.

5.3.3. Impossibility of Origination and Simultaneous Functioning of the Sense-Consciousnesses

This proof stresses that without the ālaya-vijñāna no explanation for both 1), the simultaneous functioning of more than one sense-organ, and 2), the initial moment of consciousness can be given.

This argument underscores the Buddhist theory of causation which says that for each and every moment of consciousness there must be an immediately (temporally) preceding and (qualitatively) similar condition for its occurrence. The radically discontinuous model of the functioning of consciousness given by the Vaibhāṣika theoreticians,[118] for example, required that for each moment of, say, visual consciousness there be an immediately preceding moment of visual consciousness, and so for all the other kinds of sense-consciousness. This model, according to the Yogācārins, will not explain the first moment of a particular kind of sense-

consciousness in a particular continuum i.e., where is the immediately preceding and similar condition for the occurrence of visual consciousness in the mind of an individual whose eyes have been closed for hours? Nor will it explain, they say, the simultaneous functioning of several different sense-consciousnesses, as when we see, hear, touch and smell an object as at the same time. The Yogācārins say the ālaya-vijñāna will provide such an explanation since it can act as the immediately preceding and similar condition for every moment of consciousness.

In this second proof the ālaya-vijñāna is being used as a principle of continuity, an explanatory category to account for phenomena difficult to explain on the model of radical impermanence and discontinuity evidenced by both Therāvāda and Vaibahāṣika Buddhists.

This proof does not however, prove the existence of the ālaya-vijñāna but rather the fact that several vijñānas can arise simultaneously.[119] Sthiramati say in his Commentary to the Thirty Verses:

> ...When there is a condition for the arising of a single wave in a great flood of water only a single wave occurs; and when there is a condition for the occurrence of two or three or many waves, then just so many occur. [In such a case] it is not that the great flood of water streaming along ceases to exist; it is simply that there is no sense in designating it as such. Similarly, when there is a condition for the occurrence of a single [sense]-consciousness based upone and located in the ālaya-vijñāna----which is like a flood of water---then only the visual consciousness functions [for example]. But if there is a condition for the arising of two or three [sense]-

> consciousnesses, then as many as five may function at the same time.[120]

5.3.4. The Impossibility of Clear Mental Consciousness

The third proof approaches the problem of the simultaneous functioning of different consciousnesses, concentrating on the operations of the intellectual consciousness (mano-vijñāna). The mano-vijñāna requires the ālaya-vijñāna to store the seeds (bījas). This proof does not support the existence of the ālaya-vijñāna but rather the fact that several vijñānas can arise simultaneously.

5.3.5. The Impossibility of Mutual Seeding

This proof is not concerned with the somatic aspect of ālaya-vijñāna but with its function as the Seed (bija) of ordinary forms of mind, based on the argument that the latter cannot be one another's Seed.

The fourth proof is as follows: There would [absurdly] be no seeds of virtue or non-virtue, etc. if there were no ālaya-vijñāna. There is no indefiniteness [in the pervasion] because only the ālaya-vijñāna is the place where all latent impressions are gathered[121].

> "So the type of mental latency that Both Freud and Jung envisions is something resulting from past actions and experiences which remain latent but possess potential causal efficacy until conditions are conducive to their becoming conscious. This is very similar to the basic bīja theory in the Yogācāra texts. For the Yogācārins the bijas themselves represent the latent potential for producing more Dharmas, mental factors."[122]

5.3.6. Impossibility of Action

The term 'action' (karma) here refers to the structures of mental action, given the ontological presuppositions of the Yogācāra, is the only kind of action there is. It is explained by the Sanskrit term vijñapti which refers to all mental events with intentional objects, all mental events wherein something is 'represented' to the experiencer. Vijñapti is a term used to refer to the processes of the mental life in their entirety. What there is in the world, in this theory, is consciousness representing itself to itself; the various ways in which these representations appear (as subject or as object) account for the fact that we ordinarily think of ourselves as perceiving subjects seeing objects external to us. This subject-object structure is fundamental to experience and is further sub-divided in this argument into four aspects, i.e., the inanimate, the animate, the experience of self as subject and operations of cognition. The first two sub-divisions are equivalent to the object aspect of the standard subject/object division of experience, and the latter two are equivalent to the subject aspect.

The key point in this fifth proof is that this fourfold structure of experience of continually present; it makes no sense to split up and attribute it separately to each sense-consciousness, as would have to be done if the ālaya-vijñāna is denied and it is asserted that the sense-consciousness cannot operate simultaneously. The Yogācārins argued that the only way in which this continuing fourfold structure of all experience can

adequately be explained is to say that it is located in the ālaya-vijñāna.

The four combined vijñaptis ("representations of consciousness") are: a) The bhajana-vijñapti ("world as representations of consciousness"). This is the appearance of the contingent, outer world. b) The āśraya-vijñapti ("substratum as a representation of consciousness"). This is the appearance of the moving world---the material reality of the living being---the six senses (āyatanas) and their bases. c) The aham iti vijñapti ("self-awareness as a representation of consciousness"). This is the introspective, continually operating thought "I am." d) The visaya-vijñapti ("objects as a representation of consciousness"). This is the appearance of shapes, sounds, etc. Since one notices that at one and the same time, the external and internal appear, that there is self-grasping and that there is grasping at one or other of the six sense-objects, many consciousnesses do indeed occur simultaneously.

Why are these four vijñaptis called karman ("actions")? This fourfold structure of all experiences is continually present; What there is in the world, is consciousness representing itself to itself; the various ways in which these representations appear i.e. as subject, as object etc., account for the fact that we ordinarily think of ourselves as perceiving subjects seeing objects external to us from the point of view of agent (kartr). The subject-object structure is further subdivided in this proof into four aspects, i.e., the inanimate, the animate, the

experience of self as subject and the operations of cognition. The essential point made in this fifth proof is that these four vijñaptis are continually present; that is without the ālaya-vijñāna these four are impossible. They are possible if one accepts the ālaya. This is because a) the vijñapti that is the external and internal appearance, i.e. the appearance of object and sentient being is the ālaya; b) the vijñapti that is the appearance of a self is kliṣṭa-manas; and c) the appearances as objects are the set of six, for, as it is said [in the Triṃśikā]

> Third are those [six entering consciousnesses] that observe the six objects.[123]

As it makes no sense to split up and attribute its separately to each sense-consciousness, as would be done without the ālaya-vijñāna and it is further asserted that the sense-consciousnesses cannot operate simultaneously. The only way in which these continuing four vijñaptis can adequately be explained is to say that it is located in the ālaya-vijñāna.

5.3.7. Impossibility of Physical Experience

The sixth proof is as follows: here the argument focuses on physical experience stressing that the uniformity of an individual's conscious state of mind at any given time (concentrated, pondering, etc.) cannot explain the variety of physical experience undergone by that same individual. The ālaya-vijñāna is postulated for that purpose, since only the ālaya-vijñāna can hold the 'seeds' (bījas) of various and mutually incompatible qualities at one and the same time.

5.3.8. Impossibility of Mindless Attainments

Two kinds of concentration which are unconscious (nirodhasamāpatti, asaṃjnisamāpatti) really need some level of operating vijñāna in order to return to the physical form, since its maintenance is dependent on all the aggregates (skandhas) being present. This consciousness can be subliminal, but it must be present. Here the Yogācārins opted for a redefinition of the attainment of cessation, a redefinition which is prepared to allow that this altered state of consciousness is mindless (acitta or acittaka), but not that it is without consciousness (vijñāna). Yet they recognize that the attainment of cessation must be without consciousness if what is meant by 'consciousness' is intentional consciousness, consciousness of something by one or more of the sense organs. For the canonical definitions of the attainment of cessation, there is not intentional mental events in this condition. Consequently, there must be consciousness of a sort in this condition, and that this consciousness is the ālaya-vijñāna.

5.3.9. Impossibility of Death

The question is asked: which consciousness is separated from the body at death?

Finally, because the function of the ālaya-vijñāna is to appropriate the physical form whether in the case of the sense consciousnesses or at the time of birth, the individual cannot die until the ālaya-vijñāna abandons the physical frame. It is under this biological aspect that ālaya-vijñāna appears to have

come to be introduced into the context of death.[124] For death and rebirth, the ālaya-vijñāna is, therefore, the deciding factor.

6. Ālaya-vijñāna & theories of the unconscious

Although has been a growing interest in the comparative study of ālaya-vijñāna of Vijñaptimātratā Yogācāra and the unconscious in Depth psychology (Yamada 1955; Osaki 1986; Cernovsky 1988; Waldron 1988), these articles are written from a an exclusively psychoanalytic orientation of the unconscious and have not examined, nor introduced the cognitive unconscious to Buddhist scholarship.

Research on the unconscious was initiated by psychoanalysis and until the 1950s unconscious processes were investigated almost exclusively within the psychoanalytical framework. The evidence collected within this framework was considered ambiguous mainly because the methodology used was incompatible with methodology in empirical research. As a result cognitive psychologists viewed any research investigating unconscious mental processes with suspicion until the development of the information-processing paradigm of unconscious mental processing. This paradigm not only provided support that mental processing is unconscious but much of what we process takes place outside of our awareness.

The studies discussed (Bowers, 1984; Schacter, 1984,1985, 1986,1987a,1987b,1988, 1989 etc.) demonstrated that cognitive processes inaccessible to conscious experience play an important role and supports the notion that unconscious perception, as

distinct from unconscious drives and motives, can occur without noticing and what is noticed need not be comprehended or understood. Research on implicit memory have shown preserved 'implicit knowledge' (Schacter, McAndres, and Moscovitch, 1988) in neuropsychological syndromes. Implicit knowledge is defined as a passive body of knowledge, not present in our conscious experience, not because of repression, but because it is implicit, and is revealed indirectly. Images, schemata, and working models of oneself and others generally form the background of our interactions and experiences, rather than being themselves focal and explicit. They are what Polyani (1964) calls "tacit knowledge." This challenges some of the essential assumptions of the psychoanalytic unconscious, (i.e. repression, dynamic unconscious, recoverability and inaccessibility etc.).

Both the ālaya-vijñāna and theories of the unconscious are concerned with mental processes that take place outside of conscious awareness and extent to which these unconscious mental processes affect the individual's perception of reality. However, the idea of an unconscious grounded in pathology can be challenged by the research done in cognitive psychology (Erdelyi,1974,1979,1986; Schacter, 1984, 1985, 1986, 1987a, 1987b, 1989; Marcel 1983a,1983b,1988). We do not therefore, have to accept the Freudian definition of the unconscious.

6.1. Repression

In psychoanalytic theory repression (verdrangung) referred to the simple notion that some distressing wish, idea, or memory

was forced out or blocked of consciousness. Freud said that "the theory of repression is the cornerstone on which whole structure of psychoanalysis rests"[125] Denying the existence of these contents keeps them in a state of unconsciousness. That which could not come into consciousness because of repression was considered part of the "dynamic unconscious" and that which was temporarily unconscious could easily become conscious was considered part of the "preconscious," which was descriptively unconscious, but systematically conscious. Freud always equated the repressed with an idea which had been forced into the unconscious and was separated from all other experiences. Jung, in contrast to Freud, regarded the human personality as a totality, with an interaction of the individual parts. The principle point with which Jung could not agree was Freud's tracing repression back to instinctual wishes and impulses.

A simpler account of repression uses empirically established phenomena of implicit memory as the basis for understanding apparent instances of recovery of repressed memories (Greenwald, 1992). Explanations of implicit memory assume that memory traces of an attended event are often preserved despite inability to recall the event. Because these unconscious traces influence conscious experience they can provide a basis for recovering the otherwise unretrievable event. This implicity-becomes-explicit memory account is far simpler in its theoretical interpretation than the psychoanalytic account which requires a sophisticatedly cognizant unconscious.

Translating the notion of repression into information processing terms, repression is viewed as the failure to process information, or, "defensive exclusion."[126] Repression has been redefined as the defensive exclusion of external and internal input "together with the thoughts and feelings to which such inflows give rise..."[127] In cognitive terms the system thus deactivated is said to be repressed, or, the effects of repression are regarded as being due to certain information of significance to the individual being systematically excluded from further processing.

6.2. Recoverability

What Freud claimed and what the theory of repression claims is that unconscious contents are recoverable in conscious experience. In contrast, the unconscious mental processes emphasized in cognitive psychology are not recoverable in conscious experience. For example, "unconscious inferences" are not expected, through any means, to be directly represented in conscious experience. While they can be described as if they were available to awareness, and while they are reflected in perceptual and cognitive products, these processes are not phenomenally present in conscious experience.

The difference in recoverability is a function of the contrast between the psychoanalytic emphasis on contents and the emphasis of cognitive psychology on processes. As Nisbett and Wilson (1977) have stated, one tends to consciously experience contents rather than the processes leading to these contents. The

processes do not appear to be readily accessible to conscious experience.

6.3. Inaccessibility

Using the seed metaphor (bīja) theory, one of the characteristics of the ālaya-vijñāna is be a 'conditional' consciousness. Furnished with all the seeds (sarvabījaka vipākavijñāna), seeds (bījas) are continuously being placed in the ālaya-vijñāna through the individuals actions, and being "momentary, simultaneous, proceeding continuously, determinant, dependent on conditions, and completed by their own fruit."[128] These qualities emphasize the passive, storing function of the ālaya-vijñāna. The Yogācārins consider the seeds (bījas) to be the potential for certain conditions to occur. In this view the seeds of ālaya-vijñāna would to be inaccessible to conscious experience, however, as Vasubandhu elaborates, saying that the seeds (bījas) are "individually determined", and come to 'maturation' when in a given time and place the seeds encounter their proper conditions and that each 'fruit' is only born from a seed (bīja) that is proper to it.[129]

6.4. Unconscious Influences

Determinants of thought and action that are not noticed or appreciated as such constitute unconscious influences (Bowers, 1984). According to this view, the alaya-vijnana as a type of vijñāna, is the support of mental factors, pure and defiled alike but not as its cause.[130] Each act leaves a mental impression (vāsanā) which discharges its energy or "seed" (bīja) as a future

evolution (pariṇāma) in the consciousness series. Pariṇāma refers to changes in the consciousness-series that manifest as things or selves because of the powers of the ālaya-vijñāna, manas, and pravṛtti-vijñāna in the subjective side of conscious process. The seed (bīja) of any given act remains dormant in the unconscious store-house (ālaya-vijñāna) after the act has been committed. Later, the seed (bīja) will mature as retribution (vipāka) or compensation derived from the previous act which left a mental impression (vāsanā).

Early Yogācāra accounted for the continuity of the "seeds" (bījas) of retribution, memory, etc., after normal functioning of consciousness has temporarily ceased (trance, meditation, and unconscious dreamless sleep etc.), by resorting to the notion of the ālaya-vijñāna, metaphorically, the uninterrupted series of latent "seeds" that influence behaviour and perception. This series of unconscious moments continues to function in a momentary but steady stream throughout states of unconsciousness.

7. Conclusion

In Buddhism, the mode of operation that determines behaviour and perception is termed "conditioning" (pratītya-samutpāda).[131] This "conditioning" is an ongoing process in a world viewed in Yogācāra as impermanent and not self-existent. To understand the system of consciousness requires analysing the process of conditioning that determines how various structures of consciousness function. In psychology this approach has been compared with cognitive theories of emotions.[132] Once the system

is understood, one is able to change perceptual patterns that contribute to habitual behaviour. The function of consciousness is to condition, to be a conditioner or conditioning power, to be affecting or constructing things. From the religious perspective of Yogācāra, the retributive structure of consciousness is mainly an ethical domain and is regarded as the fundamental function of all conscious activity. This underlying structure is to be investigated until a cessation of its activity occurs in meditation, or a transformation (āśraya-paravṛtti).[133]

7.1. Psychological Transformation

The Yogācārins contribution to Buddhism can be seen in their emphasis on the psychological aspects of delusion and liberation. This liberation is outlined in the theory of fundamental transformation (Āśraya-parivṛtti/parāvṛtti) which describes the psychological transformation that spiritual practice brings to an individual. This theory is one of the most important teachings of Yogācāra Buddhism.

The first occurrence of term āśraya-parivṛtti[134] in Buddhist literature[135] is tied to sexual conversion in the context of problems relating to vinaya.[136] In this early and peculiar form, the doctrine of sexual conversion usually involved the transformation of a woman to a man following her disenchantment with the nature of womanhood. This transformation is often brought about through a 'statement of truth' (satyavacana), in some cases being really an exclamation concerning the nature of the Buddha. The possibility is also maintained for the

transformation of a man into a woman and of an eunuch into a man.[137]

Yogācāra in general is concerned with the ālaya-vijñāna and its transformation. In the Yogācāra-bhūmi-sastra the ālaya-vijñāna is uprooted immediately after the āśraya-parāvrtti. The āśraya-paravṛtti is the transformation or revolution of the basic structure of consciousness; it is the conversion of the ālaya-vijñāna which stores all seeds (sarvabījaka).

The study of the ālaya-vijñāna and theories of the unconscious in Depth psychology and cognitive psychology support the notion that mental processing takes place outside of awareness. We can understand unconscious influences largely in terms of how they shape unconscious perception and thought. Behaviour can be a function of the person's phenomenal field but the <u>phenomenal field itself is a product of more mental activity</u>, as well as more sensitivity to environmental events, than one is able to notice or report. An interest in the unconscious need not be restricted to the Freudian Psychoanalytic unconscious of 'primitive drives.'

NOTES

1. Wundt, Wilhelm Max (1832-1920) - The 'father' of experimental psychology. The basic premise in Wundtian psychology is that the only certain reality is immediate experience. Proceeding from this premise, Wundt had accepted the following goals for all science: the construction of explanations of experience and the development of techniques for objectifying experience. Wundt's psychology rose and fell with the late 19th century neo-idealism. His core emphasis on volition and apperception comes straight from earlier German idealist philosophy. See A.L. Blumenthal, "A reappraisal of Wilhelm Wundht," American Psychologist, 30 (1975): 1081-1088.

2. Titchener, Edward Bradford (1867-1927). Studied philosophy at oxford and took his doctorate under Wilhelm Wundt at Leipzig. his own work was mainly on sensation and attention. For Titchener, a psychological system was useful primarily as a framework on which experimental research could be mounted. He was a structuralist because he felt that the first goal of psychology was the analysis of mind into elementary units of sensations (or attributes of sensations), the structural arrangement of which could then be used to account for higher-order processes such as emotion, will, and attention. This goal in turn heavily influenced Titchener's choice of methodology, in particular the use of controlled introspection in which trained observers reported the elements of their conscious awareness in response to controlled stimuli. See Ryan D. Tweney, "Programmatic Research in Experimental Psychology: E.B. Titchener's laboratory investigations, 1891-1927." in Psychology in the Twentieth Century Thought and Society. Ed. Mitchel G. Ash. New York: Cambridge University Press (19870 p. 35-52 and Titchener, E.B. "The Schema of Introspection." The American Journal of Psychology. 23:4 (1912) p. 485-508.

3. James, William (1842-1910) An American scholar who's work, Principles of Psychology (1890) is probably the best known book in all psychology.The book took 12 years to write but established James as the foremost psychologist of the day. The opening pages plunged into the recurrent Jamesian themes of individuality, choice, and purpose. See Miranda Shaw (1987) "Williams James and Yogacara Philosophy: a comparative inquiry." also D.C. Mathur (1978) "The Historical Buddha (Gotama), Hume, and James on the self: comparisons and evaluations." See Eugene I. Taylor (1978) "Psychology of Religion and Asian Studies: the William James Legacy."

4. Because of the inability to say what mind is, many philosophers prefer to speak not of minds as such but simply of mental facts, mental states, mental properties, mental acts, mental processes, mental events etc. We can indicate roughly what we mean by each of these terms by indicating the expressions we use to report such things. Thus, to take the last mentioned, mental events, the most important of all for the mind-body problem, we may say that it refers to the class of events we report when we say such things as "A name just came to me,' "I just had the thought that.....," "I have just decided that....," "I feel sick," "My foot hurts," etc. These are all reports of mental events. What leads us to call the events mental is that they are made immediately, without any sort of inference. The most that can be said about reports of mental events is that the person reporting need not do so on the basis of perceptions via his/her five senses or on the basis of inferences from such perceptions; the mere occurrence of the event ipso facto puts the person to whom it occurred in a position to report it. This is sometimes expressed by saying that the person has "privileged access" to these events. The term 'mind' perhaps does not matter much for experimental psychology now since it is no longer regarded as co-existence with 'the conscious mind'. The mind-body problem, mental-physical dichotomy is increasingly being supplanted by the idea that there are numerous levels of description; each of the terms 'psychological', 'neuropsychological', and 'neurophysiological', cover such levels. (Wilkes 1988).

5. Looking into one's own mind. Used as a psychological technique it has great dangers of misinterpretation, even thought introspections may seem to provide the most direct knowledge of ourselves that we have. It has, however, become clear that very little that goes on in the brain associated with the mind is accessible to conscious introspection, and we regard the mind as a much broader concept than awareness, consciousness, or what is known by introspection. Gregory. R.L. Oxford Companion to Mind. Nisbett & Wilson (1977) argued that people have no privileged introspective access to their behaviour. See Nisbett & Wilson (1977, 1977a, 1977b).

6. Helmholtz, Hermann Ludwig Ferdinand Von (1821-94). Founder of the science of perceptual physiology. Perceptions are 'unconscious inferences.' This challenged the prevailing view that responsibility, just blame and praise, depend on consciously held reasons and motivations. Sigmund Freud's notion of an active unconscious mind is a rather different idea, though equally shocking to the Victorians. For Helmholtz it was simply that most of what goes on in the nervous system is not represented in consciousness. Helmholtz made three major contributions. First, he indicated that Kant's philosophical dicta did not have absolute validity: it was indeed possible to illuminate aspects of human mental

functioning in an empirical fashion. Second, Helmholtz cleared places for molecular forms of analysis (the speed of an impulse travelling along a nerve fibre) as well as molar investigations (the ways in which complex spatial arrays are seen under both normal and distorted conditions). Finally, by stressing the perceiving subject's contribution to perception, Helmholtz became an early contributor to the ideology of cognitive science.

7. Freud, Sigmund (1856-1939) Freud's method of treatment in psychoanalysis identified resistances as a form of protection from pain, and repression as the way of eliminating that pain from conscious awareness. Repression became the fundamental principle of psychoanalysis. Repressed material was uncovered through free association and dream analysis in a long, intensive course of therapy lasting months or years. Freud's theories and methods have been criticized on several grounds: (1) unsystematic and uncontrolled data collection and interpretation; (2) overemphasis on biological forces, particularly sex, as the primary influence on personality development; and (3) a deterministic view of the influence of past behaviour.

8. See Kenneth S. Bowers (1984) "Being unconsciously Influenced and Informed." pp. 244-246 in The Unconscious Reconsidered. Term coined by Bowers to denote the unconscious as unappreciated or uncomprehended influences. Determinants of thought and behaviour are not necessarily as self-evident to consciousness or introspection as they are influential, such determinants can be perceived without being noticed, or noticed without being appreciated as influential. In either case, people's thoughts and actions are determined by factors outside awareness.

9. Spongberg, (1979) .p.171 - There are two forms of the term, vijnapti-matra and vijnaptimatrata. The -ta ending in the second form corresponds to our suffix -ness. The first form is the adjective form as in the statement: "Everything is nothing but vijnapti" or "vijnapti-only." The addition of the suffix in the second turns the qualification into an abstract noun, as in the phrase, "the doctrine of mere vijnapti" or "vijnapti-only-ness." In contrast to the Cittamatrata (thought-only-ness) doctrine of earlier Yogacarins. This doctrine focuses on the nature of the state of liberation, whereas vijnaptimatrata attempts to explain the nature of the state of bondage.

10. Some authors equate depth psychology with psychoanalysis. The key point in the notion of "depth" is that of surface appearance in contrast with what lies "within" or "beneath." One of the main methods of investigation has been the

therapeutic interview. Under this heading may be included not only psychoanalysis as practised by Freud and his followers, but also the methods of treatment adopted by those who deviated to a greater or lesser extent from the original Freudian Tradition, e.g. C.G. Jung (1875-1961), A. Alder (1870-1937), Karen Horney (1885-1952), and Melanie Klein (1882-1960). Woolger, R.J. (1988), p.352; Ellenberger, H. (1970), pp.489-500, 695; Klein, D.B. (1977), pp.177-78; 215-216.

11. Hampshire, S. (1983). p.102. "Notions of the Unconscious Mind." in States of Mind.

12. See Ellenberger's account of the history of the dynamic psychiatry, entitled, "The Discover of the Unconscious," (1970). Ellenberger's study demonstrates that the European "discovery" of the unconscious can be fully understood only within the larger contexts of European social and intellectual history. And various strands of European cultural thought provided the presuppositions upon which individuals such as Freud and Jung set about interpreting the "facts" of the unconscious. Ellenberger also points outs that debates among Continental psychologists concerning which of these functions best defines the unconscious have never been resolvable through normal scientific procedures.

13. Kuhn, T, (1962) p.43.

14. Freud, (1914), "The History of the Psychoanalytic Movement."

15. Perry & Laurence, (1984).

16. As early as 1900 Freud wrote:

"Thus there are two kinds of unconscious, which have not yet been distinguished by psychologists. Both of them are unconscious in the sense used by psychology; but in our sense one of them, which we tern the Ucs., is also inadmissible to consciousness, while we term the Pcs. because its excitations---after observing certain rules, it is true, and perhaps only after passing a fresh censorship, though nonetheless without regard to the Ucs.,---are able to reach consciousness." Freud in Interpretation of Dreams. (1900), pp.614-15.

17. "the single acts forming part of it [being] unconscious." Freud from "A Note on the Unconscious in the Psycho-Analysis" (1912), p.266.

18. Freud, The Ego and the Id (1923), pp.15-17.

19. Freud, "New Introductory Lectures on Psycho-Analysis" (1933), p.73.

20. Freud, "Ego and Id," p.25.

21. Freud, "Ego and Id," p.26

22. Freud, "Ego and Id," p.56.

23. Freud, "Ego and Id," p.57.

24. Freud, "New Lectures," p.80.

25. Freud, "A Note on the unconscious in psychoanalysis." (1912); "The Unconscious." (1915b); "The Ego and the Id". (1923); "New Introductory Lectures on Psychoanalysis" (1933).

26. Freud saw the preconscious at this stage as a sort of buffer zone between the unconscious and the conscious system.

27. Freud, (1933), p.71. New Introductory Lectures on Psychoanalysis.

28. Freud, (1917), p.93. A General Introduction to Psychoanalysis.

29. Tulving, E., and Pearlstone, Z. (1966) "Availability versus accessibility of information in memory for words." Journal of Verbal Learning and Verbal Behaviour. 5, 381-391.

30. Freud, (1912b), p.264. A Note on the Unconscious in Psychoanalysis.

31. Freud, (1912b), p.266. A Note on the Unconscious in Psychoanalysis.

32. First proposed by Freud in The Ego and the Id. (1923) and later recapitulated, with minor modifications, in New Introductory Lectures on Psychoanalysis. (1933).

33. Jung, Carl Gustave (1875-1961). The theme which unifies the large number of writings that Jung subsequently published is Individuation. Jung conceived of Individuation as being directed towards the achievement of Psychic wholeness as integration, and in characterizing this developmental journey he used illustrations from alchemy, mythology, literature, and Western and Eastern religions, as well as his own clinical findings.

34. Jung, "General Aspects of Psychoanalysis." (1913), p.241.

35. Jung, "The Transcendent Function" (1916/1958), p.89.

36. Jung, "Psychological Types." (1921), p.448

37. Jung, "The Relations Between the Ego and the Unconscious." (1916/1928). p.136.

38. Jung, "Psychological Types," (1921). p.425.

39. Jung, "Spirit and Life," (1926). p.323.

40. Jung, "Spirit and Life," (1926). p.323.

41. Jung, "Sigmund Freud in His Historical Setting." (1932), p.35.

42. Freud, (1920), "Beyond the Pleasure Principle," p.25.

43. Freud, (1900), The Interpretation of Dreams, p.615.

44. Freud, "Ego and Id," p.20.

45. Jung, "The Meaning of Psychology for Modern Man." (1933), p.140.

46. Jung, Psychological Types. Complete Works 6 (1921), p.485. We can distinguish a personal unconscious, comprising all the acquisitions of personal life, everything forgotten, repressed, subliminally perceived, thought, felt. But, in addition to these personal unconscious contents, there are other contents which do not originate in personal acquisitions but in the inherited possibility of psychic functioning in general, i.e., in the inherited structure of the brain. These are the mythological associations, the motifs and images that can spring up anew anytime anywhere, independently of historical tradition or migration.

47. Jung, Psychological Types. (1921), p.485.

48. Jung, "On the nature of the Psyche." CW 8 (1946).

49. Archetypes - The original pattern or model, from which all other things of the same kind are made.

50. Freud, "Three Essays on the Theory of Sexuality." (1905).

51. Jung, "Yoga and the West" (1936), p.537.

52. Jung, "On the Psychology of the Unconscious," CW 7 (1917/1916/1943) p.95 - "The collective unconscious, being the repository of man's experience and at the same time the prior condition of this experience, is an image of the world which has taken aeons to form."

53. Jung, "On the Psychology of the Unconscious." CW 7 (1917/1926/1943) p.77. Jung intended "impersonal" 2to mean forms not individually experienced. "Whereas the memory-images of the personal unconscious are, as it were, filled out, because they are images personally experienced by the individual, the archetypes of the collective unconscious are not filled out because they are forms not personally experienced."

54. The 'New Look' starting with Bruner & Postman, 1947.

55. Erdelyi, M.H. (1974) Hence 'New Look 2'.

56. Erdelyi, (1985).

57. Erdelyi, (1985). pp. 75-105 (1985). Contrast this paradigm to P. Janet's (1889) psychological descriptions of dissociation, who viewed unconscious influences as abnormal and pathological. See Bowers & Meichenbaum (1984) for full details of Janet's dissociation theory of the unconscious.

58. Marcel (1988)

59. The surface of the cerebral hemispheres is divided into five lobes: frontal, parietal, temporal, and occipital.

60. Diencephalon- ("interbrain)" is a subdivision of the forebrain whose principal structures are the Thalamus and Hypothalamus. Carlson, (1981). p.111, 116.

61. Episodic memory is autobiographical in character, and contains more less explicit reference to the self as the agent or experiencer of some event, and the unique environmental and organismic context in which that event occurred; semantic memory. is the "mental lexicon" of abstract knowledge, stored without reference to the circumstances in which it was acquired. The contents of memory are classified into declarative knowledge structures that represent the individual's fund of general and specific factual information, and the procedural knowledge repertoire of skills, rules, and strategies that operate on declarative knowledge in the course of perception, memory, thought, and action. Declarative knowledge can be classified as either episodic or semantic in nature. Kihlstrom, (1987). p. 1446.

62. Schacter, Daniel L., Mary Pat McAndrews, and Morris Mosovitch. "Access to Consciousness: Dissociations in neuropsychological syndromes." Thought Without Language. (Ed.) L. Weiskrantz. Oxford: Clarendon Press. (1988).

63. Prosopagnosia - people this disorder cannot recognize faces, however familiar---even their own faces in a mirror. Prosopagnosics presumably are not conscious of a thought 'that's John' when shown a photograph; yet they may react strongly to it if, John is a close friend who has recently died. So at some unconscious level, we have to assume, recognition is achieved. Wilkes, (1988). p.37.

64. Stroop effect named for the psychologist J. Ridley Stroop, who systematically demonstrated it in 1935. In Stroop's (1935) original experiment he showed people a list of color names that were printed in color in ink. Each color name was printed in a color different from the color it named, e.e. the word red might be printed in blue ink and the word blue in green ink. Seventy college students had to read a second list printed in black ink. Stroop found little difference in the reading times for the two lists. Apparently, the students could largely ignore ink color while reading. A second group of 100 students named the colors of the inks that the color words were printed in and also named the colors of a list of color patches. Stroop found that students required an average of 110 seconds to identify the ink colors on the word list. Students could not avoid reading the words when they tried to name their ink colors, and the conflict between the name and the ink color slowed down their responses. The conflict arises because the person tries to say aloud the name of the ink color, there are two color names in consciousness. One is the ink color, which is the correct response. The other is the word that is automatically read. If the person does not have to make a verbal responses but, rather, indicates in some other way what color the ink is, the interference is greatly reduced. Glass & Holyoak, (1986), p.70-71.

65. Wundt, (1862). p.438; cited in von Hartmann, (1931). p.39.

66. Eagle, (1987). pp.161-189. The psychoanalytic "dynamic unconscious" is, above all, an unconscious of aims, motives, and drives, in contrast to a cognitive unconscious of nonconscious mental processes.

67. Freud, (1933). p.133 "New Introductory lectures in psycho-analysis."

68. Freud, "The Unconscious." (1915). p.168 We know for certain that they have abundant point of contact with conscious mental processes; with the help of a certain amount of work they can be transformed into, or replaced by, conscious mental processes, and all the categories which we employ to describe conscious mental acts, such as ideas, purposes, resolutions and so on, can be applied to them. Indeed we are obliged to say of some of these latent states that the only respect in

which they differ from conscious ones is precisely in the absence of consciousness.

69. Tulving & Pearlston, (1966). "Availability Versus Accessibility of Information in Memory of Words." According to this study intact memory traces of many words not recalled under the non-cued recall conditions were available in the memory storage, but not accessible for retrieval. According to an information processing model of memory then forgetting occurs not because information in storage is destroyed, but because learned material becomes "inaccessible." This paper is concerned with a conceptual and experimental analysis of non-recall of learned items in terms of such a distinction between availability and accessibility. It describes an experiment whose primary purpose was to explore the hypothesis that a substantial part of non-recall of familiar words under typical experimental conditions is attributable to inaccessibility of otherwise intact memory traces.

70. Chomsky, Avram (1928-) Professor of Modern Languages and Linguistics at the Massachusetts Institute of Technology. His book "Syntactic Structures" was the first to outline and justify a generative conception of language.

71. The term Yogācāra means 'practitioner of spiritual discipline'. It was used to describe a definite school with well defined philosophical positions by Vasubandhu in the Abhidharmakośabhāṣya (for example at AkBh 197.5, when an opinion on a scriptural text which describes three kinds of rūpa is attributed to the Yogācārins) and thus had become established as a school-name by the fourth century AD at the latest, and probably much earlier than that. Alternative names for this school are vijñānavada (consciousness doctrine), vijñaptimātratā ([the doctrine that] there is nothing but representation) and cittamātratā ([the doctrine that] there is nothing but mind).

72. Maitreya (c.350-430) - The reputed historical teacher of Asaṅga. The name also refers to Asaṅga's tutelary deity, Lord Maitreya, who represents the Buddha's aspect as "love" (maitri). Willis, (1979) p. 183. The standard Buddhist accounts of Asaṅga's life from both the Tibetan and Chinese traditions make much of Asaṅga's encounters with Maitreya. The Tibetan tradition attributes five books to Maitreya, making Asaṅga merely the recipient and transcriber of these works. The question of Maitreya's historicity has provoked a great deal of debate since the beginning of the twentieth century see Willis [1979:53 Note 42].

73. The date of Asaṅga is problematic. Paramārtha's Life of Vasubandhu tells us that Asaṅga was Vasubandhu's eldest brother (Takakusu [1904:273-274], and that Asaṅga was

instrumental in converting his younger brother to the Mahāyāna (Takakusu [1904:-290-292]). Xuanzang's account of his travels in India repeats many of these motifs and adds specifics as to the texts received by Asanga from the celestial bodhisattva Maitreya (Beal [1981:1.226-227]). Similar details are given by Tibetan historians. Following the unanimous witness of the traditions, Asaṅga was an elder brother of Vasubandhu; that he was born towards the end of the fourth century AD in Gandhara; that he entered the Buddhist saṃgha as a young man, possibly within the Mahiśāsaka school, see Willis [1979;5ff]; that he later became enamoured of the emerging doctrines that we now call Yogācāra or Vijñaptimātratā; that he composed a number of seminal treatises in this area and that he died around the middle of the fifth century AD. (Griffiths, Paul J. [1986:175]).

74. Vijñāna - Vi[apart] jnana [knowledge;insight] - generally in Buddhist scholarship this term has been translated as 'consciousness' but Brian Galloway (1980) argues that vijñāna does not correspond to consciousness but perception because vijñāna is what happens when there is a sense organ, a sense object, no obstruction between them, and a mind that functions properly;it is naked, unadorned, apprehension of each stimulus; it grasps the mere object or the object alone. Vijñāna therefore does not correspond to the English word, "consciousness", which always involves an idea of selfhood, but to perception. I use the traditional translation of vijñāna as consciousness.

75. Sūtra is a Sanskrit term meaning "a thread". It is also used to refer to a short, aphoristic sentence and, collectively, to work consisting of such sentences (i.e., canonical texts) as opposed to śāstras (scholastic treatises). See Eliade, (1987) pp.183-84. Sūtra

76. Griffiths, (1986). p. 173 The usual version of this in Sanskrit is cittamātram idaṃ yad idaṃ traidhātukam.

77. Saṃdhinirmocana Sūtra unfolds (nirmocana) the "intentions" (sámdhi) of the Buddha that was hidden in the doctrine of voidness (i.e., Sūtra on the Explanation of the Profound Mysteries).

78. The most important passages of the Saṃdhinirmocanasūtra can be found in Lamotte's edition [1935:90-91]. Compare May [1971:279ff] for a discussion of a relevant passage in the Samadhirajasūtra. Matilal [1974] has some illuminating comments to make on these passages and provides an (English) translation of the relevant passages from the Saṃdhinirmocana.

79. The YBH was originally written or complied in Sanskrit and appears to have five major parts. The first of these parts, called Bahubhūmikavastu, is the "Basic Section", approximately equal in length to the other four parts, and is itself subdivided into 17 sections, corresponding to the 17 stages of the practice of a Bodhisattva according to the Yogācāra school (Griffiths,[1986:191-92]). YBH represents the śāstra or treatise tradition. Śāstra is a Sanskrit term meaning, first, "precept, command, rule"; hence a treatise in which precepts on a particular topic have been collected. (Eliade,[1987:80-81]).

80. See Schmithausen's study [1969]: Schmithausen thinks of the YBH as an 'allmahlich gewachsenes Schulwerk' [1969:812].

81. See Lambert Schmithausen Ālaya-vijñāna: On the Origin and the Early Development of a Central Concept of Yogācāra Philosophy. (1987). There is no explicit explanations of its literal meaning in the Yogācārabhūmi but only an implicit one which is, however, hardly original. The oldest available explanation, at least the oldest explicit explanation is rather the one that is found in the Samdhinirmocanasūtra. Other important early sources explaining the term ālaya-vijñāna are : Abhidharmasūtra, Mahāyānasaṃgraha, and Vasubandhu's Karmasiddhi, Pratitya-Samutpadavyakhya (Pratitya-Samutpadadivibhanganirdesa) and Pancaskandhaprakarana. The explanations diverge due to doctrinal developments, but also to the very ambiguity of the word 'alaya'.

82. Mahāyāna-saṃgraha [samgraha=Compendium] i.e., Compendium of the Mahāyāna.

83. A short, tersely phrased text by Asańga.

84. Vasubandhu's 20-verse text together with his own prose commentary (VVr). See Levi [1925].

85. Vasubandhu's work in 30 verses expounding the key tenets of Yogācāra ontology and psychology. This work survives in its original Sanskrit, together with Sthiramati's commentary (TBH). See Levi [1925].

86. Vasubandhu's short verse-text expounding the Yogācārin three-aspect theory. See the edition/translation by Tola and Dragonetti [1983].

87. Sources for the Vijñaptimātratā-siddhi are:
Louis de la Vallee Poussin, "Vasubandhu, Viṁśakakrikāprakarana: Traité des vingt ślokas, avec le commentaire de l'auteur," Muséon (New Series) 13 (1912): 53-90). [Romanized Tibetan text of VV, with French translation.]

Sylvain Levi, Vijñaptimātratāsiddhi: Deux tratés de Vasubandhu, Vimsatika et Triṁśikā, Bibliotheque de l'Ecole de Hautes Etudes (sciences historiques et philologiques) fascicule 245 (Paris: Librairie Ancienne Honoré Champion, 1925. [Sanskrit text of VK, VV, TK, and TB (Sthiramati's commentary on Tk).]
Sylvain Levi, Matériaux pour l'étude de systeme Vijñaptimātra, Bibliotheque de l'Ecole des Hautes Etudes (sciences historiques et philologiques) fascicule 260 (Paris: Librairie Ancienne Honoré Champion, 1932). [Includes Sanskrit emendations and French translation for Lévi 1925.]
Clarence H. Hamilton, Wei Shih Er Shih Lun: The Treatise in Twenty Stanzas on Representation-only, by Vasubandhu (Translated from the Chinese Version of Hsuan Tsang, Tripitaka Master of the T'ang Dynasty), American Oriental Series, 13(New Haven: American Oriental Society, 1938). [Hsuan-tsang's Chinese text of VV with English translation.]
Sitamsu Sekhar Bagchi, "Vijñaptimātratāsiddhi," Nava-Nalanda-Mahavihara Research Publication. 1 (1957):367-389 (+ Sanskrit pages 1-12). [Sanskrit text of VK-VV Levi 1925 without emendations), with English translation of VK-VV embedded in Bagchi's interpretation.]
Wing-tsit Chan, "The Thirty Verses on the Mind-only Doctrine," in Sarvepalli Radhakrishnan and Charles A. Moore eds., A Source Book in Indian Philosophy. (Princeton: Princeton University Press, 1957), pp.333-337. [English translation of Tk from Hsuan-tsang's Chinese version, along with (pp.328-333) a partial reprint of Hamilton 1938.]
Thomas A. Kochumuttom, A Buddhist Doctrine of Experience: A New Translation and Interpretation of the Works of Vasubandhu the Yogācārin. (Delhi: Montilal Banarsidass, 1982). [Includes English translations of Vk-VV and TK. Kochumuttom seems to have depended entirely for the Sanskrit text of VK, VV, TK, and TB on an extremely unreliable edition; Svami Mahesvarananda, Ācārya Vasubandhu pranita / vijñapti mātratāsiddhih / pancasatika / savrittika triṃśatikā kārikā / acaraya sthiramati pranitam triṃśikā bhasyanca [sic!] (Vārānasī: Gitadharma Kāryālaya, 1962). Some of the new departures in Kochumuttom's translation seem to be based on Maheśvarānanda's misprints. The misprint on Mahesvarananda's title page has apparently misled Kochumuttom into consistently calling Tk the "Triṃśatikā."]
Stefan Anacker, Seven Works of Vasubandhu: The Buddhist Psychological Doctor, Religion of Asia Series, 4 (Delhi: Motilal Banarsidas, 1984). [Includes English translations of Vadavidhi, Pancaskandhaprakarana 9PSP, Karmasiddhi-prakarana 9KSP), Vk-VV, TK, Madhyantavibhagabhasy (MVB), and Trisvabhāvanirdeśa (TSN), and reprints Sanskrit editions of VV, TK, MVB, and TSN.] Hall, (1986).

88. See (Hall, 1986; Pruden, 1988).

89. Griffiths, (1986). p. 175-76 The text of V and VVr 1-2, reads as follows (the verses of V are translated in upper case and the prose commentary of VVr is translated in lower case): 'In the [doctrine of] the Great Vehicle the three-realmed [cosmos] is established to be nothing but representation, for a sacred text says: 'O Sons of the Conqueror, this three-realmed [cosmos] is nothing but mind.' The terms 'mind', 'mental consciousness' and 'representation' are synonyms [so any of them could have been used in the sacred text quoted]. The term 'mind' [in the sacred text quoted] refers also to what is associated with mind. The term 'nothing but'[in the sacred text quoted] indicates the denial of external objects. THIS [THREE-REALMED COSMOS] IS NOTHING BUT REPRESENTATION BECAUSE OF THE APPEARANCE OF NON-EXISTENT OBJECTS; IN JUST THE SAME WAY A MAN WITH FAULTY VISION SEES SUCH THINGS AS UNREAL HAIRS AND MOONS. (1) Here it is asked: IF REPRESENTATIONS ARE WITHOUT [CORRESPONDING] EXTERNAL OBJECTS THEN THERE COULD BE NO: (i) LIMITATION [OF THEIR APPEARANCE] TO [ONE] PLACE AND TIME; (ii) NON-LIMITATION [OF THEIR APPEARANCE]TO [ONE] MENTAL CONTINUUM; (iii) PERFORMANCE OF FUNCTION. (2) What does this mean? If representations of things such as physical form occur without external objects consisting in physical form, then [such representations] do not occur because of [the presence of] external objects consisting in physical form. [If this is so then the following questions arise]: (i) Why do [such representations]arise in a particular place and not just anywhere?(ii) Why do [such representations] arise in that place at a particular time and not at just any time? (iii) Why do [such representations] arise in the continua of all those who are in a particular place at a particular time, and not just in one (as is the case, for example, for the appearance of such things as hairs in the continua of those with faculty vision, such [such thing do not appear in the continua] of others)? (iv) Why do such things as hairs and insects seen by those with faulty vision not perform the functions of [real] hairs and so forth? For it isn't the case that other things [i.e., real hairs and so forth] do not perform [their proper functions]. Also, things seen in a dream---for example food, drink, clothing, poison, weapons---do not perform their proper functions(viz., of being eaten and so forth), whereas other [real instances] of such things do perform [their proper functions]. The same is true, for example, of an unreal city, such as that in which the Gandharvas live: this doe not perform the functions of a city, whereas other [real cities] do perform [such functions]. So, if there are not external objects [corresponding to representations] it would not be proper to assert (i) limitation to [a single] time and place; (ii) non-limitation to [a single] continuum; and (iii) performance of [the appropriate] function.'

90. The Sanskrit term trisvabhāva is more often translated 'three natures'. We are dealing here with a set of categories designed to explain how consciousness functions, the three modes under which it operates. This is in part an epistemological notion and in part a descriptive-phenomenological notion.

91. Tola & Dragonetti, [1983:249] Kalpitah paratantraś ca pariniṣpanna eva ca / trayah savbhāvā dhīrānām gambhīram jñeyam iṣyate // yat khyāti paratantro'sāu yathā khyāti sa kalpitah / pratyayādhinavrttivāt kalpanamatrabhavatah//tasya khyātur yathakhyanam ya sadavidyamanatā / jñeyaḥ sa pariniṣpannaḥ savabhāvo'nanyathātvataḥ // TSN 1-3.

92. The imagined aspect is the form under which the dependent nature (paratantra) manifests itself, appears. Effectively the dependent nature is the whole of the representations etc. originated by the vāsanās' "reactualization," the totality of the unreal mental creations which constitute it. Conceived in this way, the dependent nature necessarily presents itself always with duality, i.e. composed by a subject who knows opposed to an object which is known. This imagined aspect receives the name of "imagined," because it is a mere unreal mental creation, since not true reality corresponds to the subject and to the object, which compose it, since they have not a counterpart, real, external to mind, independent from it. (Tola & Dragonetti, 1983).

93. The dependent nature is what appears and it is so called, because it exists depending on causes. The causes on which the dependent nature "depends" are the vāsanās. Any idea, cognition, etc., which is produced in the mind, leaves in the "sub-consciousness" a vasana. These vasanas are something like a weak reproduction or copy of the representations,ideas, cognitions etc., which left them. These vāsanās remain in the "subconsciousness" in a latent form, until certain conditions, they "reactualize" themselves, they pass into the consciousness, producing new conscious representations etc., similar to those by which the vasanas were left or related to them in some way. The dependent nature "depends" on these vāsanās in the sense that, if there are vāsanās, there is dependent nature, if there are no vāsanās, there is no dependent nature. (Tola & Dragonetti, 1983).

94. The word pariniṣpanna, used by the original, literally means "developed", "perfect", "real", "existent" (Monier-Williams, Dict.sub voce). I have translated it by "perfected" but it is usually translated as "absolute." (Tola & Dragonetti, 1983).

95. See Jaini, (1959b).

96. Asaṅga, in the first chapter of his Compendium of the Great Vehicle (Mahāyānasamgraha), describes the ālaya-vijñāna in such terms. See notably MS 1.2-3 and MSBh and MSU: Lamotte [1934:-1755-176]; Nagao [1982:10,111-116]. MS 1.14 and MSBh and MSU: [Lamotte 1934:221-225]; Nagao [1982:22-23,133-135]. KSP 33: Lamotte [1935b:198-199,247-249]. TBh ad T 2cd: Levi [1925:18.22-19.2}. This TBh passage reads: "HERE THE MATURATION [OF ACTION] IS THAT CONSCIOUSNESS WHICH IS CALLED 'STORE': IT HOLDS ALL SEEDS" (2cd)...here the term 'store' is used because [the store-consciousness] acts as a receptacle for the seeds of all defiled things. 'Receptacle' and 'store' are synonymous. Alternately, the term 'store' [in the expression 'store-consciousness'] means: (i) that considered as effect, all things are stored in or dependent upon that; (ii) considered as cause it is stored in or dependent upon all things......
The term 'maturation' is used because [the store-consciousness] has the quality of effecting the maturation of good and bad actions in all cosmic spheres, destinies, wombs and births [viz., in every possible kind of rebirth]. The terms 'holds all seeds' is used because [the store-consciousness] possesses the quality of being the basis for the seeds of all things." (tatrālayākhyam vijñānam vipākah sarvabījakam / ... tatra sarvasaṃkleśikadharmabījasthanatvād ālayaḥ / ...ālayaḥ sthānam iti paryāyau / atha vālīyante upanibadhyante'smin sarvadharmāḥ kāryabhāvena / tad vālīyate upanibadhyate kāraṇabhāvena sarvadhrameṣv ity ālayaḥ / ... sarvadhatugatiyonijatisu kusalakusala karmavipakatvad vipakah / sarvadharmabījāsŕayatvat sarvabījakam/). (Griffiths, 1986).

97. See Anacker, (1984).

98. Earlier, certain Buddhist schools had already introduced into their psychology certain elements which resembled the receptacle consciousness; let me mention the "member-of-existence consciousness" (bhavāṅgavijñāna) of the Tamraparniya, the "root-consciousness" (mulavijñāna) to the Mahāsāṁghikas and the "element which last until the end of Samsara" (āsaṁśarikaskandha) of the Mahiśāsakas. But it is to the Sautrantikas and not to the Vijñānavadins that the honour accrues of having first systematized the psychology of retribution-consciousness. Lamotte, (1988). English trans. of <u>Karmasiddhiprakaraṇa</u>. p.30.

99. Buddhists term this a 'Karma'.

100. See Spongberg, (1979) p.52.

101. Mano-vijñāna - "mental" awareness as superior to the five kinds of "sensorial" awareness. This technical term designates the centre of perception and apprehension, second of the seven faculties deriving from the ālaya-vijñāna.

102. Manas - Manas means mind, a thing or entity, and so it may appear to us. The Yogācārins gloss it as mana (reflective cogitation, thinking) and it like the other vijnanas should be understood as an activity. There is some debate over whether manana in text of this verse (Triṁśikā II) means (cogitation, reflection) or Manyana (conceit in the sense of vain imagining and pride). Both would fall within the activity of manas in any case. Manas is responsible for our awareness of the subject-object dichotomy; in the unpurified state, as klista-manas) defiled mind, it is the ego-postulating function.

103. Frauwallner ,(1969). 328:352: 386f <u>Die Philosphie des Buddhismus</u>.

104. Kihlstrom, John F. 1984, p.150-55 - Under some circumstances we experience profound alterations in the monitoring and/or controlling functions of consciousness. Practising a meditative discipline such as Yoga or Zen, falling asleep, and becoming hypnotized all seem to lead to such alterations; so do certain syndromes of psychopathology such as acute schizophrenia.

105. See Schmithausen (1987) In the Samahitabhūmi - the ālaya concept is used to explain exit from the attainment of cessation (nirodhasamapatti). This is a condition in which mind and its concomitants have altogether ceased to function, as also have the six sensory vijñānas. The possibility of leaving such a condition is explained by the continued presence of the ālaya.

106. Karma - From the Sanskrit verb root kṛ, "to do or make"; the noun means "action." In Buddhism, the term refers especially to the law of cause and effect, i.e., to the principle that every action produces some result.

107. Vipāka - The "maturation" cause, the form of causation proper to the individual karma (vipāka-hetu) or the "effects" or fruition from individual karma as resulting through the vipāka-form of causation (vipāka-phala).

108. The term bīja and vāsanā are usually interpreted as synonyms for the power (vasa) or energy (sakti) of the mind. In itself, bīja or vāsanā is nominally existent - that is, it is a term used as a metaphor to describe 'the process of conceptual and attitudinal changes.' See Jaini, "The Sautrāntika Theory." pp.242-44 (1959).

109. See <u>Karmasiddhiprakaraṇa</u>. (1988) by Etienne Lamotte English trans. by Leo M. Prudeń. pp.66-67.

110. This relationship of cause and effect is clearly stated in TSN (Trisvabhavanirdesa) 6: tad dhetuphalabhavena cittam dvividham isyate / yad alayakhyavijnanam pravrtty-akhyam ca saptadha // Tola and Dragonetti [1983:249].

111. Schmithausen, [1987:21,31(2.13.3)];[1976:237] "The objective contents of this alaya-vijnana consists [sic] of a mental image of the whole world and is determined by the former good and bad deeds (karman) of the respective living being. Thus, the whole world, especially the outer world, is only a subjective mental production of each being." "That for the Yogacarins even this manifold universe of fluctuating mental factors is only an imperfect or preliminary level of reality. In the mystical intuition one can become aware of a deeper reality constituted by the so-called 'Suchness' or 'True Essence.' A further implied property of the ālaya is it being subtle (suksma) or subliminal.

112. See Radhakrshnan & Moore. (1957), pp.88-89. "That Self (Atman) is not this, it is not [this] (neti, neti). It is unseizable, for it cannot be seized; indestructible, for it cannot be destroyed; unattached, for it does not attach itself; is unbound, does not tremble, is not injured..." (Brhadaranyaka Upanisad (IV.v.15). Radhafrishnan's translation read, "That self is (to be described as) not this, not this." In other words, the Atman is there described by negatives---in terms of what it is not.

113. See Schmithausen, (1987). p.3

114. See Sparham, (1992) Chapter five "Proofs of the ālaya-vijñāna," How does one prove the existence of the ālaya-vijñāna? From believable scriptural authority (agama) and through reasoning (yukti).

115. See McDermott, (1973) p.169 - Asanga's 'definition' of ālaya-vijñāna. i.e., it is said to be autonomous, enduring,non-defined, in close relationship with the samklesika dharmas which perfume it, that to which manas is attached, and that in which all the seeds (bījas) of the six pravṛttivijñānas are retained and kept from perishing. The bījas are appropriated from Sautrāntika sources and modified by the Yogācārins. The sextet of vijñānas consisting of the five outer perceptions plus manovijñāna is inadequate to account for the seeming continuity of experience.

116. The version in the YBh, extant only in Tibetan, may be found in PSems-Tsam Z12b1-4a4. The version in the ASBh, extant in the original Sanskrit, may be found in Tatia [1976:11.15-13.20]. See also McDermott [1973]. The standard study in Japanese is Hakamaya [1978].

117. See Waldron, 1988. pp. 124-25 - What this means is that conscious acts are based on or originate in the ālaya-vijñāna and the unconscious. MSg.I.8 states that "this mind (citta) furnished with all the seeds gives birth to the (manas) and the [sense-] cognitions."

118. The Vibhāṣa masters, or Vaibhāṣikas, continuators of the Sarvāstivādins.

119. Schmithausen, (1987). p.195.

120. Lévi [1925:33.26-34.1]

121. Wilson, (1984). p.449 "Ālayavijñāna exists because if it did not, there would be no seeds of virtue and so forth in the continuums of sentient beings."

122. Waldron, (1988). pp. 116-117

123. Sparham, (1992). pp.153-54.

124. Schmithausen, (1987). p.40 "Ālaya-vijñāna."

125. Freud, The History of the Psychoanalytic Movement S.E.(1914). Cited in Grunbaum, Adolf. The Foundations of Psychoanalysis: A Philosophic Critique. University of California Press, Berkeley: 1984.

126. Peterfreund, (1971); Erdelyi & Goldberg, (1979); Bowlby, (1980, 1981).

127. Bowlby, (1980). p.65.

128. Lamotte, p. 38; Nagao, p.55

129. MSgBh. T.31.329b19-c12.bh.155a7-155b8. Lamotte. 40

130. See Waldron, 1988, p. 122.MSg. 1.1 MSgU.T. 31.383a4-15.u 238b8-239a6. Lamotte, p.12.

131. Pratītya-samutpāda has been reinterpreted throughout the history of Buddhist thought. One of the quintessential doctrines of Buddhist philosophy, the term is a descriptive phrase which characterizes the type of origin or "arising" (utpada) which occurs "together with" (sam) or is occasioned by (i.e., is dependent upon) the occasion of some other phenomenon. Willis (1979)

132. Fenner, (1987), pp.217-227. Fenner compares Buddhist theories of emotions with cognitive theories of emotions in psychology based on the theories of Albert Ellis and Richard Lazarus.

133. According to Paramārtha in his Chuan shih lun. See Paul, (1984), pp. 97-98.

134. See Davidson. (1985) p. 174. The term āśraya was widely used to denote the physical form. Transformation (root verb-parivrt) was the verb noun which usually denoted the change of sex (yyanjana-parivṛtti) when such a verb was needed. Davidson concedes that the term āśrayapārivṛtti as applied to sex change did not occur either before of after the composition of the Mahayanasutralamkarabhasya. See also Sakuma (1990) p. 168-who states that the earliest usage of the term āśrayapārivrtti in the sexual sense can be found in the Viniscayasamgrahani of the Yogācārabhūmi.
Paravṛtti means to reverse directions, to go in the opposite direction; asraya-paravrtti is "the fundamental change in mental attitude which is taught as necessary to knowledge of the true doctrine." See Edgerton, Buddhist Hybrid Sanskrit Dictionary, p.320: paravrtta. In Monier-Williams, Sanskrit-English Dictionary, p.591, paravrtti is defined as "turning back or round, returning, revolving, change, interchange, exchange."

135. See Sakuma (1990) p.168

136. Vinaya - text recording the rules and regulations for Buddhist monks.

137. See Davidson (1985) p.172-173

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APPENDIX: The Eightfold Proof of the Ālaya-vijñāna

The Sanskrit given here is taken from Nathmial Tatia's [1976] edition of the Abhidharmasamuccayabhāsya. This text also represent that section of the Yogācārabhūmi call Viniścayasamgrahanī. The Tibetan translations of both the Abhidharmasamuccayabhāsya and the Yogācārabhūmi are close to identical and Sthiramati, refers explicitly to the Viniśayasamgrahaṇī in his text. I have used the Tibetan and Japanese translation of this passage give by Hakamaya [1978] and Griffiths [1986].

The eightfold proof begins with a summary verse (uddāna), proceeds with a brief statement of each of the eight arguments and then gives a detailed presentation of each argument.

Summary Verse

upāttam ādi spaṣṭatvam bījam karma na yujyate /
Kāyiko'nubhavo'citte samāpattī cyutis tathā//

Introduction

aṣṭābhir ākārair ālaya-vijñānasyāstitā pratyetavyā/
tadyathā'ntarenālaya-vijñānam
(1) āsrayôpādānâsaṃbhavataḥ
(2) ādi-pravṛtty-asaṃbhavataḥ
(3) spaṣṭa-pravṛtty-asaṃbhavato
(4) bījatvâsambhavatah
(5) karmasaṃbhavataḥ
(6) kāyikânubhavasambhavato
(7) 'cittaka-samāpatty-asambhavato
(8) vijñāna-cyuty-asaṃbhavatāś ca//

translation:

One should understand (pratyetavyā) the existence of (astitā) the ālaya-vijñāna in eight ways (astabhir akarair). That is (tadyathā): if there were no ālaya-vijñāna (antarenalāyavijñānam) the following eight well-known facts would become impossible (na yujyate):

(1) There would be no appropriation of a [physical] basis.
(2) There would be no [Emergence of] an initial (adi) [function of consciousness].
(3) There would be no [Emergence of] clarity (spastatva).
(4) There would be no condition of being a "seed" (bīja).
(5) There would be no action (karman).
(6) There would be no corporeal experience (kāyiko'nubhavah).
(7) There would be no [Two kinds] of mindless meditative absorption (acitte samāpatti).
(8) There would be no [consciousness that] passes away (cyuti).

Proofs one (upātta), six (kāyiko'nubhavah), seven (acitte samāpatti), and eight (cyuti) are all concerned with the somatic aspect of ālaya-vijñāna: its function of appropriating the body at the moment of conception; of keeping it appropriated, as a whole and throughout life i.e., even in unconscious absorption; of making its presence in the body felt by corporeal sensations even in the absence of tactile sense-perception; and of gradually abandoning the body at death.

This introduction lists each of the eight arguments which will be clarified by the following detailed presentations.

1) The Impossibility of Appropriating a Physical Form

kena kāraṇenāśrayopadānaṃ yujyate? āha / pañcabhiḥ kāranaiḥ / tathāhi /

translation:

By what reason [if there were no ālaya-vijñāna], is it impossible (na yujyate) to take a [physical] basis (āśrayopadānaṃ)? Here we say (answer) (aha): due to the following five reasons (pañcabhiḥ kāranaiḥ).

i) ālayavijñānam pūrvasamskārahetukam/ cakṣurādipravṛttivijñānam punar vartamānapratyayahetukam/ yathoktam "indriya-visaya-manaskāra-vaśād vijñānanaṃ pravṛttir bhavatî"ti vistareṇa/ idaṃ prathamaṃ kāranam//

translation:

while the ālaya-vijñāna is caused (hetukam) by previous formative forces (purva-samskara) while the sense consciousnesses arise from present formations, "the arising cognition (pravṛtti-vijñāna), as it is said [in a sutra] in detail (iti vistareṇa)" as follows: By the power of (vasad) a sense organ (indriya), a sense object (visaya), and attention (manaskāra), cognition, (the activities (pravṛttih) of (vijnana) comes into being (bhavati). The six sense consciousnesses occur on the basis of cognition. This (idaṃ) is the first reason (prathamaṃ kāranam).

(ii) api ca kusalakusalah sad vijnana-kaya upalabhyante/idam dvitiyam karanam//

translation:

Moreover (api ca) the set of six [sense] perceptions (ṣaḍ vijñāna-kāya) are experienced (upalabhyante) as virtuous (kuśala) or non-virtuous (ākuśala). This is the second reason (dvitīyam kāranaṃ).

(iii) api ca saṇṇām vijñāna-kāyānām sā jātir nopalabhyate yā 'vyākṛta-vipāka-saṃgṛhītā syāt/idaṃ tṛtīyam kāraṇam//

translation:

Further (api ca), as for the set of six categories of [sense] perceptions (saṇṇām vijñāna-kāyānāṃ), something which is included (saṃgṛhītā) in the maturation of what is neutral [i.e. neither virtuous nor non-virtuous] (avyakṛta-vipaka) is not experienced. idam tṛtīyam kāraṇam/ This is the third reason (tṛtīyam kāraṇam).

(iv)api ca pratiniyatāśrayāh ṣad vijñāna-kāyāh pravartante, tatra yena yenāśrayena yad vijñānam pravartate tad eva tenopāttam syād avaśiṣtasyānupāttateti na yujyate, upāttatāpi na yujyate vijñānavirahitatayā/ idaṃ caturthaṃ kāraṇam//

translation:

Moreover (api ca), the set of six [sense] perceptions (sad vijñāna-kāyāh) function (pravartante) with the definite (pravartate) physical bases (āśrayah), (tatra yena yenasrayena yad vijñānam pravartate) [i.e. sight operates only in the eyes, hearing in the ears, etc.]. And it is not proper to say (na yujyate) either (i) that a particular sense-perceptions appropriates only that physical basis (tatra yena yenāśrayena yad vijñānaṃ pravartate tad eva tenopāttam) in virtue of which it functions and that there might be no appropriation of the remainder (avasista); or (ii) that there might be appropriation in the absence of consciousness (vijñāna-virahita)/.idaṃ caturthaṃ kāraṇam/ This is the fourth reason.

(v) api ca punaḥ punar āśrayasyopādānadosah prasajyate / tahāhi caksurvijñānam ekada pravartate ekadā na pravartate evam avaśiṣṭani / idam pancamaṃ kāraṇam /

translation:

Furthermore (api ca) it would be reduced to absurdity (prasajyate) [if those set of six take the body] there would be the flaw (dosah) that [in one life] a body would be taken many times (punah punar āśrayasya-upādāna). This is so because (tathāhi) the eye perception (cakṣur-vijñānam) sometimes arises (ekadā pravartate) and sometimes does not arise (ekadā na pravartate).idam pañcamam kāraṇam /This is the fifth reason.

iti pūrvakarmapravarttamāna pratya[ya]-hetuto'pi kuśalākuśalato'pi taj-jāty-anupalambhato'pi pratiniyatāśrayato'pi punaḥ-punar-upādāna-dosato'pi na yujyate//

translation:

Thus (iti), [if there were to be no ālaya-vijñāna one would have to assert that the set of six takes the body. And since, there are the following five causes why this is impossible];

1) By reason of (hetutah) previous action (pūrva-karma) and present conditions (pravarttamana pratyaya). [Eye perceptions and the other pravṛtti-vijñāna arise from the conditions at hand].
2) [The set of six consciousness are seen to be] virtuous and non-virtuous (kuśala-ākuśala tah-api).
3) Also none [of six consciousness] is seen (taj-jāty anupalambhato'pi (anupalambhata-api) to be a sort which would be categorized as being a maturation which is not a subject of moralizing (kuśala-āksálataḥ-api).
4) Also [the set of six consciousness operate on] strictly defined substrata (pratiniyata-āśrayatah-api)
5) There is the fault that again and again one would take a body (punah-punar-upādānadoṣato'pi).

This first proof is divided into five sub-sections. Section (i) points out that a categorization of the causes of the pravṛttivijñānani can be given by listing present or preceding events, and that this leaves no place for causation by long past events. It is the ālaya which provides for and accounts for the second kind of causation. Section (ii) and (iii) state a fundamental presupposition of Buddhist theories about karma and causation: that the causal principle which brings about the maturation of karmic effect is in itself neutral. The six 'functioning consciousnesses' are not neutral but originate in experience which has both affective and moral tone. The argument goes that the alaya must be postulated in order to allow for the maturation of karmic effect which in itself has no moral tone. Sub-section (iv) points out that the appropriation of a new physical body at the moment of a new birth would not be possible without a vipākavijñāna, a 'maturation consciousness' which can only be the alaya. This because the other six consciousnesses cannot appropriate the physical body as a whole since each of them has its own specific physical basis or locus (i.e. visual consciousness is located in or based on the eye and so forth). Each one of the six pravṛttivijñānani therefore appropriates only its own specific physical basis. Something more is required to appropriate the whole of the physical body at once, and this, according to the proof, can only be the ālaya.

2) Impossibility of Origination and Simultaneous Functioning of the Sense-consciousness

Kena kāraṇenādipravṛttisambhavo na yujyate/ sa cet kaścid vaded yady ālayavijñānam asti tena dvayoḥ vijñānayoh yugapat pravṛttir bhaviṣyati/ sa idam syād vacanīyaḥ/adoṣa eva bhavān doṣasamjñi/ tathāhi bhavaty eva dvayor vijnanayor yugapat pravṛttiḥ/ tat kasya hetoḥ/ tathā hy ekatyasya yugapad draṣṭukāmasya yavad

vijñātukāmasyāditaitaretaravijñānapravrttir na yujyate/ tathāhi tatra manaskāro'pi nirviśiṣṭa indriyam api viṣayo'pi//

translation:

By what reason (kena kārena) a very first activity of [consciousness] (ādi-pravṛtti) is impossible (sambhavah-na-yujyate)? sa cet kascid vaded yaky ālaya-vijñānam asti tena dvayoh vijñānayoh yugapat pavrttir bhavisyati / If one person says (sa ced kascid vaded) "if there is an alaya-vijnana (yady ālaya-vijñānam asti) then (tena) two consciousness (dvayoh vijñānayoh) will come into being (pravrttir bhavisyati) simultaneously (yugapat) [in response] we would should say to him as follows (sa idam syad vacaniyah):
"you are imagining a fault (dosa-samjni) wherein no fault at all (adosa eva bhavan)." This is because (tathahi) there is indeed (bhavaty eva) the simultaneous operation (yugapat pravṛttih) of two consciousness (dvayor vijñānayor). And why is this so? (tat kasya hetoh). Because (tathāhi the alternate (itaretara) activity of consciousness from the beginning (adita) would be impossible (vijñāna-pravṛttir no yujyate) for a person simultaneously wanting to see (ekatyasya yugapad drastu kamasya), and so forth, up to wanting to mentally conscious of something (yavad vijñātu-kamasya) [if there were no alaya-vijnana]. This is because (tathāhi) in such a case (tatra) the mental attitudes (manaskāro'pi), sense-faculties (indriyam) and also the objects (visayo'pi) [which cause active-consciousness (pravṛtti-vijñāna) have no special factor (nirvisista) [which would cause one set of causes to bring about one particular result].

If there can only be one samanantarapratyaya in any one continuum at any one time, then, without the ālaya there can only be one kind of consciousness in any one continuum at any one time. The alaya can act as samanantarapratyaya for all the various sense-consciousnesses at once and therefore allow for both their simultaneous functioning in a single mind and for the first moment of a particular kind of consciousness in a given mind. The point about the non-distinctness of attention (manaskara), sense-organ (indriya) and sense-object (viṣaya) merely suggests that the body of necessary and sufficient conditions for the occurrence of any instant of sense-consciousness (which is simply equivalent to attention, sense-organ and sense-object) is simultaneously present for all of the varied sense-consciousnesses. There is therefore no reason why they should not operate simultaneously.

3) The Impossibility of Clear Mental Consciousness

kena kāraṇenāstyām yugapad vijñāna-pravṛttau mano-vijñānasya cakṣur-ādi-vijñāna-sahānucarasy spastatvam na saṃbhavati / tathāhi yasmin samaye'tītam anubhūtam viṣayaṃ samanusmarati tasmin samaye'vispasto mano-vijñāna-pracāro bhavati na tu tathā

vartamāna-visayo manah-pracāro'vispasto bhavati / ato'pi yugapat pravṛttir vā yujyate'vispastatvam vā mano-vijñānasya//

translation:

By what reason (kena kārena) the mano-vijñāna, which is accompanied by (sahanucarasya) the eye-consciousness, etc. (caksur-adi-vijñāna), would not operate more clearly (i.e., perceives clearly) (spasttatvam na sambhavati) if [these two consciousness did not occur simultaneously (asatyam yugapad vijñāna-pravṛttyam)? Why is this so (tathāhi)? While (yasmin samaye-tasmiṅ samaye) the function of the mano-vijñāna (mano-vijnana-pracarah) recollection an object (visayam samanusmarati) experienced previously (stitam anubhutam) by sense-consciousness is not so clear (avipasta), the function of mano-vijñāna (manah-pracarah) toward the present object (vartamana-visayah) is not unclear (na tu tatha avipasto bhavati) [as in the former case]. Therefore, (ato'pi) it is possible to maintain (yujyate) both simultaneous activity (yugapat pravṛittih) unclarity (avipastatvam) of the mano-vijñāna (mano-vijñānasya).

4) Impossibility of Mutual Seeding

Kena kāraṇena bījatvaṃ na saṃbhavati saṇṇām vijñānakāyānām anyonyam/ tathāhi kuśalānantaram akuśalam utpadyate akuśalanantaram kuśalam tadubhayānantaram avyākṛtam hīnadhātukānantaraṃ madhyadhātukam madhyadhātukānataraṃ praṇītadhātukam evaṃ praṇītadhātukānataraṃ yāvad dhīnadhātukam sāsravānantaram anāsravam anāsravānantaraṃ sāsravam laukikānantaraṃ lokottaram lokottarānantaraṃ laukikam/ na ca teṣām tathā bījatvaṃ yujyate/ dīrghakālasamucchinnāpi ca saṃtatiś cireṇa kālena pravartate tasmād api na yujyate //

translation:

By what reason (kena kārena) the set of six consciousness (saṇnām vijñāna-kayanam) are not (na saṃvhavati) a seed-state (bījatvam) for each other (anyonyam)? Since (tathāhi) non-virtues (akuśala) come about (utpadyate) after (anantaram) virtues (kuśala), virtues come about after non-virtues and [state of mind] that are not a subject of moralizing (avyakrta) come about after both of these (tad-ubhaya),likewise, since [states of mind] the fine realm (pranta-dhatuka) come about after those in the bad realm (hina-dhatuka), [states of mind] in the fine realm come about after those in the middle realm (madhya-dhatuka), and so on down to [states of mind] in the bad realm come about after those in the fine realm; and since contaminated (sāsrava) [states of mind] come about after uncontaminated (anasrava) ones, transcendental (lokottara) [states of mind] come about after worldly (laukika) ones and worldly [states of mind] come about after transcendental ones it is impossible (na yujyate) for these to be seed-states (tesam tatha bījatvam). Also (tasmād api), it is

impossible (na yujyate) [for the set of six consciousness to be the location of seeds] because a [mental] continuum (samtati) that has been severed, even for an extended period (dirgha-kala-samucchina-api ca), comes forth after a long period of time (cirena kalena pravartate).

The idea that the six sense-consciousness can mutually 'see' one another is a Sautrāntika view. It is rejected in favour of the idea that the ālaya acts as the receptacle for all 'seeds'---future possibilities of action and sensation---even when the seeds have incompatible qualities.

5) The Impossibility of Action

Kena kāraṇenāsatyām yugapad vijñānapravrttau karma na sambhavati / tathāhi samāsatas caturvidham karma/ bhajanavijñaptir āśrayavijñaptir aham iti vijñaptir visayavijñaptis ceti/ etā vijñaptayaḥ kṣaṇe kṣaṇe yugapat pravartamānā upalabhyante/ na caikasya vijñanasyaikśmin ksaṇe idaṃ evam-rūpam vyatibhinnaṃ karma yujyate//

translation:

By what reason (kena kāraṇena) an action does not occur (karma na sambhavati), if a number of consciousness could not function simultaneously (asatyam yugapad vijñanapravrttau)? This is, in brief (samasatah) because action is fourfold (tathahi caturvidhamkarama):

a) Perception of environment (bhajanavijñapti).
b) Perception of basis, i.e. the physical body of oneself and others (āśrayavijñapti).
c) Perception of thinking "I" (ahamitivijñapti).
d) Perception of objects (visayavijñapti).

These [four kinds of] appearance or knowledge (etā vijñaptayah) are experienced (upalabhyante) as functioning conjointly (yugapta pravarta-mana) in every moment (kṣaṇe kṣaṇe):
thus it is not possible (na ca - yujyate) that action (karma) analyzed in the [fourfold] manner (idaṃ evam-rūpam vyatibhinnam) should be attributed to a single [sense]-consciousness in a single moment (ekasya vijñāna-ekasmin kṣaṇe).

Here the term pratibhasa is used instead of vijñapti and the four categories are artha (for bhajana), sattva (for āśraya), atma (for aham) and vijñaptit (for visaya). Despite the differences in terminology, the general point remains the same that is all experience in every moment, according to the Yogācāra, has these structures.

6) The Impossibility of Physical Experience

Kena kāraṇenāsaty ālaya-vijñāne kāyiko'nubhavo (kāyiko'nubhavaḥ) na yujyate / tathāhyekayasya yoniśo vā'yoniśo vā cintayato vā'nuvitarkayato va samāhita-cetaso va'samāhita-cetaso ye kāye kāyānubhavā utpadyant'neka-vidhā bahu-nānā-prakārās te na bhaveyur upalabhyante ca / tasmād apy asty ālaya-vijñānam //

translation:

Were there to be no ālaya-vijñāna (asaty ālaya-vijñāna), why can there be no (kena karanena-na yujyate) bodily experience (kāyiko'nubhavah)? This is so because (tathahy), for one who is thinking (cintayat) or engaged in mental analysis (anuvitarkayat) correctly (yoniśaḥ) or incorrectly (ayoniśaḥ); for one whose mind is concentrated (samahita-cetas) or unconcentrated (asamahita-cetas) [for all these] those manifold (anekavidha) and variegated (bahunānāprakārāḥ) [if there were no ālaya-vijñāna],these bodily experiences do not occur. They are, however, experiential fact. Therefore (tasmād apy) there is ālaya-vijñāna-vijñānam).

7) The Impossibility of Mindless Attainments

Kena kāraṇenāsaty ālaya-vijñāne'cittā samāpattir na saṃbhavati / tathā hy asaṃjñi-samāpannasya vā nirodha-samāpannasya vā vijñānam eva kāyād apakrāntam syat / nānapakrantam tatah kāla-kriyaiva bhavet / yathoktaṃ bhagavatā---vijñānaṃ cāsya kāyād apakrāntaṃ bhavatīti//

translation:

For what reason (kena Karāṇena) there can be no (na sambhavati) mindless attainment (acitta samapattih) if there is so because (tathahy), [if there were no ālaya-vijñāna], there would be the [absurd] consequence that the consciousness (vijñana) of one who has attained either Absorption into the state of an unconscious being (asamjni-samapanna) or Absorption into cessation (nirodha-samapanna) would have departed from that person's body (kyadapakrantam syat). If it did not depart (nanaprakrantam), then (tatah) he simply dies (kala-kriyaivabhavet).

8) The Impossibility of Death

Kena kāraṇenāsaty ālaya-vijñāne cyutir (cyuti) api na yujyate / tathāhi cyavamānasya vijñānam ūrdhava-deham (urdhva-deha) vā śīti-kurvan vijahāti, adho-deham (adho-deha) vā / na ca mano-vijnanam kadacin na pravartate / ato'py ālaya-vijñānasyaiva dehopādānakasy vigamād deha-śītatā (deha-sitata) upa[la]bhyate dehāpratisaṃvedanā (dehapratisamvedana) ca / na tu mano-vijñānasya (mano-vijñāna) // ato' pi na yujyate//

translation:

If there were no ālaya-vijñāna (asaty ālaya vijñāne), why can (kena kāraṇena) death (cyuti) not occur (na yujyate)? This is because (táthāhi), the consciousness of one who is dying (cyavamānasya vijñānam) abandons (vijahāti), growing cold (siti kurvakurvan) either from the top of the body (urdhvr-deha) or the bottom of the body (adho-deha). But there is never a time (na-kadacin) when the mano-vijñāna is not functioning (manovijñānam-na pravartate). So it is because of (ato'py) the departure of the ālaya-vijñāna (ālaya-vijñānasya-vigamad), which acts as appropriate of the body (deha-upadanakasya), that the coldness of the body (deha-śītatā) and lack of sensation (deha-apratisamvedana) are experienced (upabhyate). It is not because of the departure of mano-vijñāna (na tu mano-vijñānasya). Therefore (ato'pi) [death] also cannot occur (na yujate) [without the ālaya-vijñāna].

The metaphor of the body cooling at the moment of death either from the top down or from the bottom up relates to the Buddhist ideas about the future destiny of the dying person. The person will go either 'upwards', to one of the heavenly realms, or 'downwards', to one of the hells, depending on spiritual condition and the weight and flavour of their accumulated karma. In the former case, the person dies from the feet upwards as the ālaya-vijñāna ascends through the top of the head on its way to rebirth in a higher cosmic realm; in the latter, the person dies from the head downwards. The point of this eighth proof is to demonstrate that 1) death is defined as the departure of consciousness from the body. 2) all the possible types of consciousness with the exception of the ālaya-vijñāna are straightforwardly intentional; i.e., they have distinct objects and definite modes of functioning. 3) a full explanation of the process of death requires the postulation of a type of consciousness that is not intentional. 4) death can only be explained by postulating the existence of the ālaya-vijñāna.